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The $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ high resolution infrared bands of FCIO_3

Elisabetta Cané ^a, Luciano Fusina ^{a*}, Riccardo Tarroni ^a and Klaus Burczyk ^b

^a*Dipartimento di Chimica Fisica e Inorganica, Facoltà di Chimica Industriale, Università di Bologna, Viale Risorgimento 4, 40136, Bologna, Italy*

^b*Anorganische Chemie, FB C Universität, 42097 Wuppertal, Germany*

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Address for proofs and correspondence:

Prof. Luciano Fusina

Dipartimento di Chimica Fisica e Inorganica

Viale Risorgimento 4

40136 Bologna

ITALY

tel : +39 051 209 3707

FAX : +39 051 209 3690

E-mail : fusina@ms.fci.unibo.it

Abstract

The high resolution infrared spectra of the mono isotopic species $F^{35}Cl^{16}O_3$, $F^{37}Cl^{16}O_3$, $F^{35}Cl^{18}O_3$ and $F^{37}Cl^{18}O_3$ have been analysed in the region of the $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ perpendicular combination bands, from 1920 to 2060 cm^{-1} . Both bands are perturbed by the anharmonic interaction effective between the $\nu_2 = \nu_4 = 1$ and $\nu_2 = 2, \nu_5 = 1$ excited states of E symmetry. The $\nu_2 + \nu_4$ bands are of medium strong intensity while the $2\nu_2 + \nu_5$ ones are very weak. Since the origins of the two bands differ by about 10 cm^{-1} , the $2\nu_2 + \nu_5$ bands at lower wavenumbers are almost completely hidden by $\nu_2 + \nu_4$. In total, about 3400, 2400, 2800 and 3200 transitions have been assigned for $F^{35}Cl^{16}O_3$, $F^{37}Cl^{16}O_3$, $F^{35}Cl^{18}O_3$ and $F^{37}Cl^{18}O_3$, respectively. The assignments of each dyad have been analysed simultaneously with the inclusion of the anharmonic resonance term in the model Hamiltonian. The ro-vibration parameters of the $\nu_2 = \nu_4 = 1$ and $\nu_2 = 2, \nu_5 = 1$ excited states have been obtained, together with the deperturbed band origins and the anharmonic resonance coefficients W_{245} . Combining the $\nu_2 + \nu_4$ origins with those of the ν_2 and ν_4 fundamentals, the anharmonicity constants x_{24} have been derived for the four molecules and compared to the ab initio values calculated taking into account the Fermi resonance.

Keywords: perchloryl fluoride, high resolution infrared spectra, combination bands, rovibrational analysis, anharmonic resonance, anharmonicity constants.

1. Introduction

Among the prolate symmetric rotors of C_{3v} symmetry, perchloryl fluoride has been the subject of extensive spectroscopic investigations during the last 20 years. The great majority of these studies have been performed using mono isotopic samples, $F^{35}Cl^{16}O_3$, $F^{37}Cl^{16}O_3$, $F^{35}Cl^{18}O_3$, and $F^{37}Cl^{18}O_3$, to reduce the spectral congestion due to the isotopic effect of the chlorine atom. The fundamental bands of its six vibration normal modes, ν_1 , ν_2 , and ν_3 , of A_1 symmetry, ν_4 , ν_5 , and ν_6 , of E symmetry, have been ro-vibrationally analysed from high resolution infrared spectra [1-9]. Furthermore, the analysis was extended to first overtone and combination bands for all isotopic species and several anharmonicity constants have been derived [10-14]. The ground state of this quasi-spherical rotor has been fully characterized too [5] and the equilibrium molecular structure has been derived [9]. The conspicuous amount of available experimental data prompted the ab initio calculations of the anharmonic force field of perchloryl fluoride at high level of theory [14]. In most cases, theoretical values of the molecular parameters, fundamental frequencies and anharmonicity constants, compare well with the experimental counterparts.

x_{24} is one of the anharmonicity constants whose experimental values are still lacking. The theoretical values, -0.05 , 0.07 , 0.50 , and 1.17 cm^{-1} (the positive signs of the last three constants were reported incorrectly in [14]), for $F^{35}Cl^{16}O_3$, $F^{37}Cl^{16}O_3$, $F^{35}Cl^{18}O_3$, and $F^{37}Cl^{18}O_3$, respectively, are too small and the positive signs are opposite in comparison with those of the other x_{ij} constants, which are in the range from -8 to -0.3 cm^{-1} . A possible explanation of this anomaly could be the neglect of the anharmonic interaction affecting the $\nu_2 = \nu_4 = 1$ state in the calculation. In fact, the cubic term of the anharmonic potential, $\phi_{245}q_2q_4q_5$, is responsible of the interaction between the $\nu_4 = 1$ and the $\nu_2 = \nu_5 = 1$ states [3,8,9] and between higher excited levels of the same symmetry, characterized by at least one

quantum of excitation in ν_4 and in ν_2 plus ν_5 . This was evidenced in the analysis of the $2\nu_4$ and $\nu_2 + \nu_4 + \nu_5$ bands of $\text{F}^{35}\text{Cl}^{16}\text{O}_3$ [11].

To clarify this point, further investigations are requested. The x_{24} constants can be obtained from the ro-vibration analyses of the $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ bands, including the interaction between the excited states in the model Hamiltonian. In addition, the ab initio values of the x_{24} constants should be recalculated taking into account the anharmonic resonance contribution.

This work presents the analysis of the $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ bands from the spectra recorded using mono isotopic pure samples of the four symmetric isotopologues of perchloryl fluoride. The combination bands are of perpendicular type and are located from 1920 to 2060 cm^{-1} . The results of the ro-vibration analysis of these combination bands will be outlined in the following sections.

In addition, the results of the calculation of the ab initio values of x_{24} , x_{25} , x_{45} and g_{45} will be presented. For this calculation we have removed the resonant term from the analytic perturbative formulae. Finally, the experimental x_{24} constants will be obtained combining the deperturbed $\nu_2 + \nu_4$ band origins with those of the ν_2 and ν_4 fundamentals [1-4,8,9] and compared to the corresponding ab initio values.

In the following the studied isotopologues will be designated by a short notation, i.e. (35,16) is used to indicate $\text{F}^{35}\text{Cl}^{16}\text{O}_3$.

2. Experimental

The synthesis of the mono isotopic samples was reported in [5]. In the same paper the recording conditions and the calibration details of the Fourier transform infrared spectra are listed in Table 1, columns X and V, for (35,16) and (37,16), respectively, and in Table 2,

columns M and L, for (35,18) and (37,18), respectively. All spectra were recorded using a Bruker 120 HR interferometer, at Wuppertal. The resolution of (35,16) and (37,16) spectra is quoted $4.4 \times 10^{-3} \text{ cm}^{-1}$, the data precision is estimated to be $3.0 \times 10^{-4} \text{ cm}^{-1}$, while the resolution of (35,18) and (37,18) spectra is $4.3 \times 10^{-3} \text{ cm}^{-1}$ and the data precision $2.0 \times 10^{-4} \text{ cm}^{-1}$.

3. Spectra description

The $\nu_2 + \nu_4$ bands have medium strong intensities at the chosen recording conditions and are clearly apparent in each spectrum, being centred at about 2032, 2007, 1984 and 1958 cm^{-1} for (35,16), (37,16), (35,18) and (37,18), respectively. On the contrary, the $2\nu_2 + \nu_5$ bands are very weak and their presence could be inferred from the anomalous features observed in the $\Delta K = -1$ side of the $\nu_2 + \nu_4$ bands, where the $2\nu_2 + \nu_5$ band centres are located, see Figure 1. The $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ band centres differ by about 16, 15, 11, and 9 cm^{-1} in (35,16), (37,16), (35,18) and (37,18), respectively, with the $2\nu_2 + \nu_5$ bands located at lower wavenumbers.

[Insert figure 1]

The general appearance of $\nu_2 + \nu_4$ is similar for the four isotopologues, so the following description refers to all the analysed spectra and the observed minor differences will be pointed out. The bands extend for about 50 cm^{-1} and their shapes are characterized by the pQ_K and rQ_K sub-branches which extend to higher and lower wavenumbers from the rQ_0 position. Only the sub-branches with $K'' = 3, 6, 9, \dots$ are observed since the allowed levels are those with $k - l = 3p$, where p is an integer, because the three identical oxygen atoms have nuclear spin quantum number $I = 0$. Successive pQ_K and rQ_K sub-branches are almost equidistant, with a separation of ca. 0.45 cm^{-1} , with the J structure degrading to lower

wavenumbers. The $\Delta K = -1$ side of the band is mainly constituted by patterns comprising $^pP_K(J)$, $^pP_{K+3}(J+1)$, $^pP_{K+6}(J+2)$... transitions, which extend from low to high wavenumbers, in (35,16), (37,16) and (35,18), see Figure 2. In (37,18) the transitions in a pattern reverse the direction extending from high to low wavenumbers for $K'' \leq 9$, see Figure 3.

[Insert figures 2 and 3 near here]

The structure of the R branches can be described as a succession of $^rR_K(J)$, $^rR_{K+3}(J+1)$, $^rR_{K+6}(J+2)$... transitions extending to low wavenumbers for increasing J and K values but reversing their direction for $K'' \geq 21$ in (35,16), $K'' \geq 15$ in (37,16), and $K'' \geq 9$ in (35,18), as it can be observed in Figures 4-6.

[Insert figures 4,5,6 near here]

In (37,18) the $^rR_K(J)$ transitions constitute groups characterized by the same J value and increasing K from high to low wavenumbers and reversing their direction for $K'' \geq 12$, see Figure 7.

[Insert figure 7 near here]

The pR and rP branches are generally weak (see Figure 2) and have been mainly identified from the assigned rR and pP transitions with the help of ground state combination differences (GSCD) obtained from the precise ground state molecular constants [5]. In total, 3334, 2334, 2521, and 2441 transitions have been assigned to $\nu_2 + \nu_4$ of (35,16), (37,16), (35,18) and (37,18), respectively. The presence of the $2\nu_2 + \nu_5$ bands in the investigated spectral range is highlighted by the enhancement of the line densities, due to the Q branch structure close to the band centres, at about 2017 cm^{-1} in (35,16), 1993 cm^{-1} in (37,16), 1974 cm^{-1} in (35,18) and 1952 cm^{-1} in (37,18), see Figure 1. The transitions of $2\nu_2 + \nu_5$ belonging to the rR , rQ

and, rP branches, whose intensities are increased by the interactions between the $v_2 = v_4 = 1$ and $v_2 = 2, v_5 = 1$ levels, were identified after the completion of the assignments of $v_2 + v_4$. Two $^rR_K(J)$ sub-branches of $2v_2 + v_5$ for (37,18) are shown in Figure 3; their intensities are comparable to those of the $^pP_K(J)$ transitions of $v_2 + v_4$ observed in the same region. This is peculiar of (37,18) since the anharmonic resonance is effective on levels with values of the K quantum number lower than those in (35,18), (37,16) and (35,16). A similar behaviour was evidenced in the analyses of $v_4 / v_2 + v_5$ [3,8,9]. The number of the transitions assigned to $2v_2 + v_5$ are 64, 34, 236, and 757, for (35,16), (37,16), (35,18) and (37,18), respectively.

4. Analysis

4.1. Band analyses

We started the analysis from the $v_2 + v_4$ band of (35,16), which is characterised by well distinguishable features. First, about one hundred strong lines constituting the regular patterns of the pP branches were tentatively assigned and the corresponding pQ transitions were identified by means of GSCD. Subsequently, we concentrated on the $\Delta K = +1$ side of the band, at a first glance more irregular in its general appearance. After having plausibly assigned about fifty rR transitions, the overall data set was fitted as outlined in the following.

The ro-vibration analyses of $v_4 / v_2 + v_5$ [3] and $2v_4 / v_2 + v_4 + v_5$ [11] dyads for (35,16) evidenced the existence of perturbations due to the anharmonic resonance between the excited states. We expected that the same interaction could affect the rotational structure of the $v_2 = v_4 = 1$ and $v_2 = 2, v_5 = 1$ states. In consequence, the $v_2 + v_4$ assigned transitions were fitted taking into account the $v_2 = 2, v_5 = 1$ levels and the anharmonic interaction perturbing them. The initial values of the rotational and centrifugal distortion constants of the excited states were obtained from the corresponding ground state parameters [5] and their vibration

dependences α_i^A , α_i^B and $\beta_i^{D_J}$, $\beta_i^{D_{JK}}$ and $\beta_i^{D_K}$, with $i = 2, 4, 5$ [14]. $A\zeta_{v_2=v_4=1}$ and $A\zeta_{v_2=2, v_5=1}$ were set equal to the corresponding $A\zeta_{v_4=1}$ and $A\zeta_{v_2=v_5=1}$ constants [3]. The starting values of the deperturbed upper state energies were derived from

$$G(v_2 = 1, v_4 = 1, l_4 = \pm 1) = (v_2)_0 + (v_4)_0 + x_{24} \quad (1)$$

$$G(v_2 = 2, v_5 = 1, l_5 = \pm 1) = (v_2)_0 + (v_2 + v_5)_0 + 2x_{22} + x_{25} \quad (2)$$

where $(v_i)_0$ is the origin of the indicated fundamentals or combination bands [2,3] and x_{ij} are the anharmonicity constants [3,10,14]. Equations (1) and (2) have been obtained from the classical formula of vibrational term value referred to the ground state [15].

The term values of the excited ro-vibration levels were obtained as

$$E_v(J, k, l)/hc = E_v^0 + B_v[J(J+1) - k^2] + A_v k^2 - 2(A\zeta)_v k l - D_{vJ}[J(J+1)]^2 - D_{vJK}[J(J+1)]k^2 - D_{vK}k^4 + \eta_{vJ}[J(J+1)]kl + \eta_{vK}k^3 l \quad (3)$$

where $v = (v_2 = v_4 = 1)$ or $v = (v_2 = 2, v_5 = 1)$, the signed quantum number $k = \pm K$, and $l = \pm 1$.

The off diagonal matrix element resulting from the anharmonic resonance term in the Hamiltonian model is:

$$\langle v_2 = 2, v_4 = 0, l_4 = 0, v_5 = 1, l_5 = \pm 1, J, k | (H_{30} + H_{32}^{JK}) / hc | v_2 = 1, v_4 = 1, l_4 = \pm 1, v_5 = 0, l_5 = 0, J, k \rangle = W_{245} + W_{245}^K k^2 + W_{245}^J J(J+1) \quad (4)$$

Here $W_{245} = \phi_{245} \times \left(\frac{v_2 + 1}{2}\right)^{1/2} \times \left(\frac{v_4 + l_4}{2}\right)^{1/2} \times \left(\frac{v_5 \pm l_5 + 2}{2}\right)^{1/2} = \phi_{245} \times \frac{\sqrt{2}}{\sqrt{2}} \times 1 \times 1 = \phi_{245}$, the cubic force constant [16,17]. The initial value of the anharmonic interaction constant W_{245} was set equal to 4.06 cm^{-1} , while the J and K dependences, W_{245}^J and W_{245}^K , were fixed to zero. The value of W_{245} derives from the Fermi constant $W_{245}^F = 2.87 \text{ cm}^{-1}$, obtained from the analysis of the $v_4 / v_2 + v_5$ dyad [3], according to $W_{245} = \phi_{245} = \sqrt{2} W_{245}^F$.

The ground state term values used to calculate the transition wavenumbers were derived from the corresponding parameters which include the coefficient of the $\Delta k = \pm 3$ interaction term ε_0 [5]. They are reported in Table 1 of this paper for completeness. The ground state eigenvalues were obtained from the appropriate energy matrices. The diagonal elements were calculated from

$$E_0(J, k)/hc = B_0 [J(J+1) - k^2] + A_0 k^2 - D_{0J} [J(J+1)]^2 - D_{0JK} [J(J+1)]k^2 - D_{0K} k^4 \quad (5)$$

and the off-diagonal ones from

$$\langle v, l, J, k | H/hc | v, l, J, k \pm 3 \rangle = \varepsilon_v (2k \pm 3) [J(J+1) - k(k \pm 1)]^{1/2} [J(J+1) - (k \pm 1)(k \pm 2)]^{1/2} [J(J+1) - (k \pm 2)(k \pm 3)]^{1/2} \quad (6)$$

with $v = 0$ and $l = 0$.

Preliminary fits of the transitions assigned to $v_2 + v_4$ were encouraging: the attributed J and K values were found to be correct and the starting value of the deperturbed $v_2 + v_4$ origin was notably improved. Therefore, the assignments of the $v_2 + v_4$ transitions were greatly extended to higher J and K values, using as a guide their predicted positions and the

GSCD. Thanks to these assignments the rotational and the centrifugal distortion constants were refined, improving also the overall quality of the fit. However, transitions with $K'' \leq 12$ and $J'' > 40$ evidenced that two ro-vibrational perturbations, with $\Delta l = 0$, $\Delta k = \pm 3$, and $\Delta l = \Delta k = \pm 2$ selection rules, are active within the $v_2 = v_4 = 1$ state. The corresponding off-diagonal matrix elements were included in the calculations. They are, respectively, equation (6) with $v = (v_2 = v_4 = 1)$, $l_4 = \pm 1$ and

$$\begin{aligned} \langle v_2 = v_4 = 1, l_4 = +1, J, k+2 | H/hc | v_2 = v_4 = 1, l_4 = -1, J, k \rangle = \\ -\frac{1}{2} q_l [J(J+1) - k(k \pm 1)]^{1/2} [J(J+1) - k(k \mp 1)]^{1/2} \end{aligned} \quad (7)$$

As a consequence, a better reproduction of the wavenumbers for transitions with $K'' \leq 12$ and $J'' > 40$ was obtained. The assignments of $v_2 + v_4$ were completed and in total 3334 transitions were collected, with J'' and K'' up to 81 and 63.

In the course of the analysis of $v_2 + v_4$ the lines of the $2v_2 + v_5$ transitions were also searched for, in particular those of the $\Delta K = +1$ sub-branches, whose intensities are expected to increase due to the anharmonic resonance. In fact, this should be effective on the $kl > 0$ levels due to the opposite values of $A\zeta_{v_2=v_4=1}$ and $A\zeta_{v_2=2, v_5=1}$, 0.0936 and -0.0685 cm^{-1} , respectively [3, 11]. However, the results of the search were very scarce, notwithstanding the line positions were predicted with sufficient reliability. Only 64 lines were assigned to $2v_2 + v_5$ of (35,16), with $kl \geq 42$, the value corresponding to the avoided crossing of the interacting levels as evidenced in the eigenvectors of (35,16).

In the least-squares fits a unitary statistical weight has been attributed to each transition that corresponds to an isolated line, while the weight has been reduced to $1/n$ if n transitions are assigned to the same wavenumber. Splitting of the $K'' = 3, 6, 9 \dots A_1, A_2$

doublets has not been observed. In the last cycle of the refinements all the experimental data that differed from the corresponding calculated values by more than 0.003 cm^{-1} , about ten times the estimated precision of the measurements, have been excluded from the data set. The spectroscopic parameters, the numbers of assigned transitions and of rejected lines, the values of J_{max}'' and K_{max}'' , and the standard deviations of the fit are collected in Table 2. For the $2\nu_2 + \nu_5$ band only the deperturbed origin, B and $A\zeta$ were determined, all the other parameters were constrained either to the values calculated as described above or to zero.

The $\nu_2 + \nu_4 / 2\nu_2 + \nu_5$ band analyses for (37,16), (35,18) and (37,18) were performed according to the same procedure adopted for (35,16). In (37,16) the bands are weaker than in (35,16) so the transitions assigned to $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ are less numerous, equal to 2334 and 34, respectively. The avoided crossing of the interacting levels is predicted for $kl \geq 36$ but, due to the weakness of the band, transitions of the $\Delta K = +1$ branches with $K'' \geq 36$ were not detected. This explains the very small number of transitions assigned to the $2\nu_2 + \nu_5$ band. The results of the fit are listed together with those of (35,16) in Table 2. The analysis of the spectra for the heavier isotopologues was difficult in the early stages, because the assignment of the first nucleus of rR transitions was complicated by the irregular appearance of the lines, particularly in (37,18). The avoided crossings of the interacting levels are observed for $kl \geq 27$ and 12 in (35,18) and (37,18), respectively. Therefore, in addition to the transitions assigned to $\nu_2 + \nu_4$ of (35,18) and (37,18), 2521 and 2441, a large number of transitions were identified in the $2\nu_2 + \nu_5$ bands of (35,18) and (37,18), 236 and 757, respectively. Thank to the more conspicuous data sets, in addition to the band origin, B and $A\zeta$, also A , D_J , D_{JK} and η_K of the $\nu_2 = 2$, $\nu_5 = 1$ states resulted statistically determined. The sets of parameters for (35,18) and (37,18) are collected in Table 3. As it can be seen in Tables 2 and 3, less than 4% of the total number of assigned transitions were discarded in each fit according to the rejection criterion.

They are randomly distributed in the various sub-branches and correspond to blended or very weak lines. Four tables with the full list of assigned transition wavenumbers, quantum numbers and residuals from the fits associated with $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ bands of the four FCIO_3 isotopologues are deposited with the British Library under the Supplementary Publications scheme. The tables are also available from the authors.

4.2. Computed anharmonicity constants

In Ref. [14] we have presented a high-level full-quartic ab initio force field for FCIO_3 . From the quartic force field, the main spectroscopic constants have been derived for all known isotopologues, following standard second-order perturbation approach [18]. No Fermi resonance was taken into account at that stage. However, a few of the computed anharmonicity constants presented in [14], i.e. x_{24} , x_{25} , x_{45} , and g_{45} , showed irregular trends among the various isotopologues, calling for a re-examination of the problem. In the light of the findings of the present paper, such anomalous behaviour can be attributed to the improper handling of the Fermi resonance between the $\nu_4 = 1$ and $\nu_2 = \nu_5 = 1$ vibrational levels. In fact, it is known [19] that in case of Fermi resonance, the resonant term, i.e. the term containing the ϕ_{245} force constant, must be removed from the analytic perturbative formulae for the anharmonicity constants. The aforementioned constants have then been recomputed by means of the SPECTRO software [20]. The results are reported in Table 4 and compared to the previous ones and to experimental values determined in the present study or available in the literature.

5. Results and discussion

The values of the spectroscopic parameters listed in Tables 2 and 3 compare well with the corresponding ones in the ground state, in magnitude, sign and uncertainty. The corresponding parameters of (35,16) and (37,16) are in very good agreement and their uncertainties are comparable for both the $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ bands. Similar results are observed for (35,18) and (37,18). Some of the parameters of the $\nu_2 = 2, \nu_5 = 1$ state, A , D_J , D_{JK} and D_K for (35,16) and (37,16) and D_K for (35,18) and (37,18) were kept fixed to their initial values since, when refined, they resulted statistically undetermined and ineffective in improving the standard deviation of the fits. On the contrary, the D_K constants of $\nu_2 = \nu_4 = 1$ for (35,18) and (37,18) were fixed to the values in Table 3 since they resulted 100% correlated with the A constants in the refinement procedures. Those refined values, truncated to the number of statistically significant figures, differ from the initial ones and contribute to improve the standard deviations of the fits. For all isotopologues the $A\zeta_{\nu_2=\nu_4=1}$ and $A\zeta_{\nu_2=2, \nu_5=1}$ constants have been obtained with good precision. They compare very well with the corresponding values of $A\zeta_{\nu_4=1}$ and $A\zeta_{\nu_2=\nu_5=1}$ [3,8,9], respectively, both in sign and magnitude. The anharmonic resonance coefficients W_{245} for (35,18) and (37,18) have been determined with very good precision, while for (35,16) and (37,16) they resulted 100% correlated with the $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ deperturbed band origins. In order to prevent divergence of the least-squares procedure W_{245} were kept fixed to refined values, appropriately truncated, see Table 2. The final values of W_{245} for the four isotopologues are very close to each other and to their initial values. The J and K dependences of the anharmonic resonance coefficients, W_{245}^J and W_{245}^K , could not be determined and were fixed to zero. The values of the ε and q_i coefficients of the $\nu_2 = 1, \nu_4 = 1$ state compare well, both in magnitude and sign, with the corresponding ones in $\nu_4 = 1$ [3,8,9]. The refined parameters in Tables 2 and 3 are statistically

well determined. However, it should be pointed out that the precisions of the $v_2 = v_4 = 1$ term values, E_v^0 , for both (35,16) and (37,16) are unrealistic. They represent only a statistical outcome which derives from the constraint imposed on the 100% correlated W_{245} parameters. Two or three times the reported uncertainties are more realistic estimates, comparable to those of (35,18) and (37,18).

Apart from the case mentioned above, all the refined parameters are free from internal correlations, with the exception of $A\zeta_{v_2=2, v_5=1}$ which is 96% correlated with $A_{v_2=2, v_5=1}$ in (35,18). The standard deviations of the fits in Tables 2 and 3 are about 3 ÷ 5 times the estimated precision of the experimental data.

Combining the deperturbed band origins of the $v_2 + v_4$ bands with those of the v_2 and v_4 fundamentals [2-4,8,9] the anharmonicity constants x_{24} have been calculated. The obtained values, listed in Tables 2 and 3, allow a consistent comparison with those recalculated from ab initio methods including the anharmonic resonance. From the inspection of Table 4 it can be evidenced that, notwithstanding the differences between the experimental and recomputed values of x_{24} decrease, the calculated values of x_{24} are still considerably smaller than the experimental ones, a discrepancy due to a lack of accuracy of the computed force fields. This problem may be traced back to difficulties in the ab initio calculations of the anharmonicity of the Cl–O bond stretching, which is the dominant deformation involved in the v_4 mode, (see Table 7 of [14]). Similar problems were noticed for the anharmonicity constants involving v_1 , the other mode corresponding to the Cl–O bond stretching. Another possible explanation could be the neglect of important interactions between the states presently investigated and some nearby dark states. We are confident that this possibility can be ruled out for several reasons. First, for each isotopologue, a large number of transitions has been fitted to a consistent set of parameters which include only three interaction constants, with a standard

deviation of the fits close to the experimental uncertainty. Second, the $v_2 = v_4 = 1$ and $v_2 = 2$, $v_5 = 1$ states are well isolated, since the closest state which could interact via Fermi resonance, $v_2 = 2$, $v_6 = 1$, is 200 cm^{-1} lower in energy. Moreover, the presence of a Fermi interaction between $v_4 = 1$ and $v_2 = 1$, $v_6 = 1$ has not been evidenced in earlier analyses [3,8,9]. Finally, the values of x_{24} are similar in all isotopologues and close to those of the x_{25} anharmonicity constants. In addition, the values of the corresponding parameters presently calculated are very similar for all isotopologues. Thus, the inclusion of the Fermi resonance in the calculations is essential to remove the irregular trend evident in Table 10 of [14]. More noticeably, the x_{25} values are in much better agreement with their experimental counterparts, the only exception being x_{25} of (37,16).

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References

- [1] K. Burczyk and H. Bürger, J. Mol. Spectrosc. **118**, 288 (1986).
- [2] K. Burczyk, H. Bürger, M. Le Guennec, G. Wlodarczak and J. Demaison, J. Mol. Spectrosc. **148**, 65 (1991).
- [3] K. Burczyk, H. Bürger and L. Halonen, J. Mol. Spectrosc. **159**, 265 (1993).
- [4] F. Meguellati, G. Graner, H. Bürger, K. Burczyk, H.S.P. Müller and H. Willner, J. Mol. Spectrosc. **164**, 368 (1994).
- [5] F. Meguellati, G. Graner, K. Burczyk, H. Bürger, G. Pawelke and P. Pracna, J. Mol. Spectrosc. **184**, 371 (1997).
- [6] F. Meguellati, G. Graner, K. Burczyk and H. Bürger, J. Mol. Spectrosc. **185**, 392 (1997).
- [7] G. Graner, F. Meguellati, A. Ceausu, K. Burczyk, G. Pawelke and P. Pracna, J. Mol. Spectrosc. **197**, 76 (1999).
- [8] E. Cané, L. Fusina and K. Burczyk, J. Mol. Spectrosc. **239**, 146 (2006).
- [9] E. Cané, L. Fusina and K. Burczyk, J. Mol. Spectrosc. **247**, 57 (2008).
- [10] E. Cané, L. Fusina, G. Pawelke and K. Burczyk, J. Mol. Spectrosc. **244**, 24 (2007).
- [11] E. Cané, L. Fusina and K. Burczyk, J. Mol. Spectrosc. **262**, 16 (2010).
- [12] E. Cané, L. Fusina and K. Burczyk, J. Mol. Spectrosc. **253**, 30 (2009).
- [13] G. Graner and K. Burczyk, J. Mol. Spectrosc. **208**, 51 (2001).
- [14] E. Cané, L. Fusina, M. Lamarra, R. Tarroni and K. Burczyk, J. Phys. Chem. A **112**, 13729 (2008).
- [15] G. Herzberg, *Molecular Spectra and Molecular Structure. II Infrared and Raman Spectra of Polyatomic Molecules*, 12th ed. (Van Nostrand Reinhold Company New York/Cincinnati/Toronto/London/Melbourne, 1966), p. 211.
- [16] I.M. Mills in *Theoretical Chemistry. Quantum Chemistry*, vol. I (The Chemical Society London, 1974).

- [17] A.R. Hoy, I.M. Mills and G. Strey, *Mol. Phys.* **24**, 1265 (1972).
- [18] D. Papousek and M.R. Aliev, *Molecular Vibrational-Rotational Spectra* (Academia, Prague, 1982)
- [19] S. Califano, *Vibrational States* (Wiley, London, 1976).
- [20] J.F. Gaw, A. Willetts, W.H. Green and N.C. Handy, in *Advances in Molecular Vibrations and Collision Dynamics*, (J. Bowman, Ed., JAI Press, Greenwich, CT, 1990).

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Figure captions

Figure 1. Overview of the $\nu_2 + \nu_4$ band of $\text{F}^{37}\text{Cl}^{18}\text{O}_3$. In the expanded region of the spectrum the onset of the enhancement of line intensities and densities caused by the $2\nu_2 + \nu_5$ Q branch structure is indicated by an arrow.

Figure 2. Detail of the $\nu_2 + \nu_4$ band of $\text{F}^{35}\text{Cl}^{16}\text{O}_3$. Two patterns of ${}^pP_K(J)$ transitions and part of the ${}^rP_K(J)$ sub-branch are evidenced. The J and K assignments are indicated.

Figure 3. Detail of the $\nu_2 + \nu_4$ and $2\nu_2 + \nu_5$ bands of $\text{F}^{37}\text{Cl}^{18}\text{O}_3$. One pattern of ${}^pP_K(J)$ transitions of the $\nu_2 + \nu_4$ band and two ${}^rR_K(J)$ sub-branches of $2\nu_2 + \nu_5$ are identified. The J and K assignments are indicated. Lines of $2\nu_2 + \nu_5$ have been evidenced by an asterisk.

Figure 4. Detail of the $\nu_2 + \nu_4$ band of $\text{F}^{35}\text{Cl}^{16}\text{O}_3$. One pattern of ${}^rR_K(J)$ transitions is evidenced. The J and K assignments are indicated.

Figure 5. Detail of the $\nu_2 + \nu_4$ band of $\text{F}^{37}\text{Cl}^{16}\text{O}_3$. Two patterns of ${}^rR_K(J)$ transitions are evidenced. The J and K assignments are indicated.

Figure 6. Detail of the $\nu_2 + \nu_4$ band of $\text{F}^{35}\text{Cl}^{18}\text{O}_3$. Two patterns of ${}^rR_K(J)$ transitions are evidenced. The J and K assignments are indicated.

Figure 7. Detail of the $\nu_2 + \nu_4$ band of $\text{F}^{37}\text{Cl}^{18}\text{O}_3$. Three ${}^rR_K(J)$ sub-branches are evidenced. The J and K assignments are indicated.

Table 1. Ground state molecular constants (in cm^{-1}) of FClO_3^{a} .

parameter	$\text{F}^{35}\text{Cl}^{16}\text{O}_3$	$\text{F}^{37}\text{Cl}^{16}\text{O}_3$	$\text{F}^{35}\text{Cl}^{18}\text{O}_3$	$\text{F}^{37}\text{Cl}^{18}\text{O}_3$
A_0	0.1871217(42)	0.1871364(29)	0.166325417(100)	0.166331592(59)
B_0	0.17541085(8)	0.17532656(6)	0.16379784(5)	0.16374819(4)
$D_{0J} \times 10^7$	0.49979(9)	0.49939(9)	0.42716(7)	0.42654(7)
$D_{0JK} \times 10^7$	0.5534(5)	0.5591(6)	0.3937(4)	0.3977(4)
$D_{0K} \times 10^7$	-0.76 ^b	-0.76 ^b	-0.5916(1)	-0.6288(1)
$\varepsilon_0 \times 10^8$	-0.307(60)	-0.320(64)	-0.531(8)	-0.547(9)

^a From Table 4 of [5]. Standard uncertainties (1σ) in parentheses refer to the least significant digits.

^b Fixed to the value predicted by force field calculations [5].

Table 2. Spectroscopic parameters (in cm^{-1}) for the $v_2 = v_4 = 1$ and $v_2 = 2, v_5 = 1$ states of $\text{F}^{35}\text{Cl}^{16}\text{O}_3$ and $\text{F}^{37}\text{Cl}^{16}\text{O}_3$ ^a.

parameter	$\text{F}^{35}\text{Cl}^{16}\text{O}_3$		$\text{F}^{37}\text{Cl}^{16}\text{O}_3$	
	$v_2 = v_4 = 1$	$v_2 = 2, v_5 = 1$	$v_2 = v_4 = 1$	$v_2 = 2, v_5 = 1$
E_v^0	2031.9372541(515)	2018.054319(414)	2006.8871702(833)	1994.250225(716)
A	0.186383548(111)	0.1868779 ^b	0.186424702(193)	0.1868865 ^b
B	0.1745807071(444)	0.174413646(136)	0.1745184569(854)	0.174364219(457)
$D_J \times 10^7$	0.4919554(939)	0.48206 ^b	0.489917(197)	0.48080 ^b
$D_{JK} \times 10^7$	0.567662(299)	0.6175 ^b	0.59021(105)	0.6234 ^b
$D_K \times 10^7$	-0.776923(707)	-0.81 ^b	-0.78753(136)	-0.81 ^b
$A\zeta \times 10^1$	0.93603254(905)	-0.6852248(436)	0.9027537(265)	-0.7843734(799)
$\eta_J \times 10^6$	0.0	0.0	-0.06724(329)	0.0
$\eta_K \times 10^6$	0.13973(478)	0.0	0.53269(496)	0.0
$q_t \times 10^4$	-0.321408(776)	0.0	-0.337318(857)	0.0
$\varepsilon \times 10^8$	-0.74643(444)	0.0	-0.7523(121)	0.0
W_{245}		4.01 ^b		4.00 ^b
No. of assigned transitions	3334	64	2334	34
No. of rejected transitions	31	4	48	8
J''_{max}	81	66	71	55
K''_{max}	63	51	48	33
$\sigma(\text{fit}) \times 10^3$		0.84		0.85
x_{24}		-2.12663(6)		-1.97993(9)

^a Standard uncertainties (1σ) in parentheses refer to the least significant digits.

^b Constrained value. See text.

Table 3. Spectroscopic parameters (in cm^{-1}) for the $v_2 = v_4 = 1$ and $v_2 = 2, v_5 = 1$ states of $\text{F}^{35}\text{Cl}^{18}\text{O}_3$ and $\text{F}^{37}\text{Cl}^{18}\text{O}_3$ ^a.

parameter	$\text{F}^{35}\text{Cl}^{18}\text{O}_3$		$\text{F}^{37}\text{Cl}^{18}\text{O}_3$	
	$v_2 = v_4 = 1$	$v_2 = 2, v_5 = 1$	$v_2 = v_4 = 1$	$v_2 = 2, v_5 = 1$
E_v^0	1983.491856(176)	1975.572852(618)	1958.187572(155)	1954.644758(273)
A	0.165780480(332)	0.16589507(276)	0.165694968(198)	0.166118694(499)
B	0.162980782(132)	0.162822026(650)	0.162953794(132)	0.162788863(256)
$D_J \times 10^7$	0.421427(279)	0.42030(157)	0.421913(288)	0.419137(613)
$D_{JK} \times 10^7$	0.434789(904)	0.41397(531)	0.412842(646)	0.45677(163)
$D_K \times 10^7$	−0.6594 ^b	−0.6361 ^b	−0.6471 ^b	−0.6735 ^b
$A\zeta \times 10^1$	0.8629568(823)	−0.681507(456)	0.8653878(209)	−0.6153930(681)
$\eta_J \times 10^6$	−0.18467(549)	0.0	0.0	0.0
$\eta_K \times 10^6$	1.23866(374)	0.0	0.11966(329)	−0.2006(101)
$q_t \times 10^4$	−0.23893(110)	0.0	−0.26623(117)	0.0
$\varepsilon \times 10^8$	−0.74021(421)	0.0	−0.75010(683)	0.0
W_{245}	3.970755(121)		4.0901850(389)	
No. of assigned transitions	2521	236	2441	757
No. of rejected transitions	61	23	98	27
J''_{max}	71	59	71	60
K''_{max}	54	39	66	48
$\sigma(\text{fit}) \times 10^3$	1.04		1.10	
x_{24}	−2.0539(3)		−1.9985(2)	

^a Standard uncertainties (1σ) in parentheses refer to the least significant digits.

^b Constrained value. See text.

Table 4. Effects of the inclusion of the $\nu_4 / \nu_2 + \nu_5$ Fermi resonance on the computed anharmonicity constants (in cm^{-1}) for FCIO_3 .

parameter	$\text{F}^{35}\text{Cl}^{16}\text{O}_3$			$\text{F}^{37}\text{Cl}^{16}\text{O}_3$			$\text{F}^{35}\text{Cl}^{18}\text{O}_3$			$\text{F}^{37}\text{Cl}^{18}\text{O}_3$		
	calc. ^a	calc.	experimental	calc. ^a	calc.	experimental	calc. ^a	calc.	experimental	calc. ^a	calc.	experimental
x_{24}	-0.05	-0.65	-2.12663(6) ^c	0.07 ^b	-0.55	-1.97993(9) ^c	0.50 ^b	-0.68	-2.0539(3) ^c	1.15 ^b	-0.56	-1.9985(2) ^c
x_{25}	-2.00	-1.43	-1.50983(6) ^{c,d}	-2.02	-1.42	-2.21516(7) ^{c,e}	-2.66	-1.50	-1.5845(2) ^{c,d}	-3.19	-1.50	-1.7037(2) ^{c,d}
x_{45}	-2.50	-2.80		-2.44	-2.73		-2.01	-2.60		-1.68	-2.54	
g_{45}	-0.15	-0.45		-0.10	-0.41		0.13	-0.47		0.43	-0.43	

^a From [14]. The values have been calculated neglecting the Fermi resonance.

^b The signs of these constants have been reported incorrectly in [14]

^c Standard uncertainties (1σ) in parentheses refer to the least significant digits.

^d From [9].

^e From [8].

Table I
Observed and Calculated Transition Wavenumbers in the $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$ Bands of $\text{F}^{35}\text{Cl}^{16}\text{O}_3$

(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RP (65, 12)	64 13	2005.00340	2005.00215	124	2+4 PP (65, 15)	64 14	2008.86835	2008.86729	106
2+4 RP (64, 15)	63 16	2005.09194	2005.09253	-58	2+4 PP (66, 18)	65 17	2008.87937	2008.87734	203
2+4 RP (64, 12)	63 13	2005.45746	2005.45829	-83	2+4 PP (67, 21)	66 20	2008.89086	2008.89052	34
2+4 RP (63, 15)	62 16	2005.54773	2005.54749	24	2+4 PP (68, 24)	67 23	2008.90726	2008.90634	92
2+4 RP (62, 18)	61 19	2005.65808	2005.65878	-70	2+4 RP (59, 3)	58 4	2008.90726	2008.90755	-28
2+4 RP (66, 3)	65 4	2005.73912	2005.74097	-185	2+4 PP (69, 27)	68 26	2008.92600	2008.92443	158
2+4 RP (61, 21)	60 22	2005.79602	2005.79718	-116	2+4 PP (70, 30)	69 29	2008.94540	2008.94442	98
2+4 RP (63, 12)	62 13	2005.91291	2005.91286	5	2+4 PP (71, 33)	70 32	2008.96638	2008.96603	35
2+4 RP (61, 18)	60 19	2006.11145	2006.11103	42	2+4 RP (57, 9)	56 10	2008.98977	2008.99027	-50
2+4 RP (65, 3)	64 4	2006.19714	2006.19816	-102	2+4 PP (74, 42)	73 41	2009.03830	2009.03815	15
2+4 RP (62, 12)	61 13	2006.36488	2006.36584	-96	2+4 RP (56, 12)	55 13	2009.05050	2009.05055	-5
2+4 RP (61, 15)	60 16	2006.45319	2006.45268	51	2+4 PP (75, 45)	74 44	2009.06241	2009.06396	-155
2+4 RP (60, 18)	59 19	2006.56103	2006.56169	-66	2+4 PP (76, 48)	75 47	2009.09072	2009.09038	34
2+4 RP (64, 3)	63 4	2006.65294	2006.65374	-80	2+4 RP (55, 15)	54 16	2009.12968	2009.13007	-39
2+4 RP (59, 21)	58 22	2006.69704	2006.69798	-93	2+4 RP (54, 18)	53 19	2009.23106	2009.23206	-101
2+4 RP (61, 12)	60 13	2006.81635	2006.81726	-90	2+4 PP (62, 9)	61 8	2009.31329	2009.31037	292
2+4 RP (60, 15)	59 16	2006.90198	2006.90290	-91	2+4 PP (61, 6)	60 5	2009.31329	2009.31222	107
2+4 RP (63, 3)	62 4	2007.10771	2007.10780	-8	2+4 PP (63, 12)	62 11	2009.31329	2009.31382	-53
2+4 RP (58, 21)	57 22	2007.14598	2007.14597	1	2+4 PP (60, 3)	59 2	2009.32292	2009.32113	180
2+4 RP (60, 12)	59 13	2007.26652	2007.26709	-57	2+4 PP (64, 15)	63 14	2009.32292	2009.32165	128
2+4 RP (59, 15)	58 16	2007.35077	2007.35152	-75	2+4 PP (65, 18)	64 17	2009.33391	2009.33316	75
2+4 RP (58, 18)	57 19	2007.45785	2007.45823	-37	2+4 PP (66, 21)	65 20	2009.34907	2009.34779	128
2+4 PP (67, 12)	66 11	2007.49618W	2007.49291	327	2+4 RP (58, 3)	57 4	2009.35375	2009.35351	23
2+4 PP (68, 15)	67 14	2007.49618	2007.49493	125	2+4 PP (67, 24)	66 23	2009.36589	2009.36508	81
2+4 PP (66, 9)	65 8	2007.49618	2007.49529	89	2+4 PP (68, 27)	67 26	2009.38607	2009.38462	145
2+4 RP (62, 3)	61 4	2007.55836	2007.56007	-170	2+4 PP (69, 30)	68 29	2009.40711	2009.40607	104
2+4 RP (60, 9)	59 10	2007.64990	2007.65178	-188	2+4 PP (70, 33)	69 32	2009.43141	2009.42914	226
2+4 RP (59, 12)	58 13	2007.71500	2007.71534	-34	2+4 RP (56, 9)	55 10	2009.43141	2009.43331	-191
2+4 RP (58, 15)	57 16	2007.79850	2007.79855	-5	2+4 PP (71, 36)	70 35	2009.45454	2009.45357	96
2+4 RP (57, 18)	56 19	2007.90402	2007.90409	-7	2+4 RP (55, 12)	54 13	2009.49222	2009.49243	-21
2+4 PP (66, 12)	65 11	2007.95244	2007.95047	198	2+4 PP (73, 42)	72 41	2009.50591	2009.50565	25
2+4 PP (65, 9)	64 8	2007.95244	2007.95139	106	2+4 PP (74, 45)	73 44	2009.53211	2009.53293	-82
2+4 PP (67, 15)	66 14	2007.95244	2007.95393	-149	2+4 PP (75, 48)	74 47	2009.56030	2009.56081	-51
2+4 PP (64, 6)	63 5	2007.95783	2007.95765	19	2+4 RP (54, 15)	53 16	2009.57008	2009.57071	-63
2+4 PP (68, 18)	67 17	2007.96304	2007.96108	196	2+4 RP (53, 18)	52 19	2009.67142	2009.67150	-8
2+4 PP (69, 21)	68 20	2007.97373	2007.97135	238	2+4 PP (61, 9)	60 8	2009.76091	2009.76025	66
2+4 PP (70, 24)	69 23	2007.98629	2007.98426	203	2+4 PP (60, 6)	59 5	2009.76091	2009.76063	28
2+4 RP (61, 3)	60 4	2008.00942	2008.01082	-140	2+4 PP (62, 12)	61 11	2009.76666	2009.76516	150
2+4 RP (56, 21)	55 22	2008.03650	2008.03714	-64	2+4 PP (59, 3)	58 2	2009.76666	2009.76800	-134
2+4 PP (76, 42)	75 41	2008.09736	2008.09858	-123	2+4 PP (63, 15)	62 14	2009.77519	2009.77445	74
2+4 RP (59, 9)	58 10	2008.09736	2008.09950	-214	2+4 PP (64, 18)	63 17	2009.78782	2009.78742	40
2+4 RP (58, 12)	57 13	2008.16111	2008.16200	-89	2+4 RP (57, 3)	56 4	2009.79867	2009.79789	78
2+4 RP (57, 15)	56 16	2008.24395	2008.24399	-5	2+4 PP (65, 21)	64 20	2009.80395	2009.80351	43
2+4 RP (56, 18)	55 19	2008.34894	2008.34836	59	2+4 PP (66, 24)	65 23	2009.82347	2009.82226	121
2+4 PP (64, 9)	63 8	2008.40665	2008.40594	72	2+4 PP (67, 27)	66 26	2009.84490	2009.84327	163
2+4 PP (65, 12)	64 11	2008.40665	2008.40647	18	2+4 PP (68, 30)	67 29	2009.86556	2009.86619	-63
2+4 PP (63, 6)	62 5	2008.41213	2008.41073	140	2+4 RP (55, 9)	54 10	2009.87434	2009.87478	-45
2+4 PP (66, 15)	65 14	2008.41213	2008.41138	75	2+4 PP (69, 33)	68 32	2009.89116	2009.89072	44
2+4 PP (67, 18)	66 17	2008.42117	2008.41998	118	2+4 PP (70, 36)	69 35	2009.91779	2009.91662	117
2+4 PP (68, 21)	67 20	2008.43283	2008.43170	113	2+4 RP (54, 12)	53 13	2009.93183	2009.93272	-89
2+4 PP (69, 24)	68 23	2008.44613	2008.44607	5	2+4 PP (71, 39)	70 38	2009.94543	2009.94366	178
2+4 RP (60, 3)	59 4	2008.45968	2008.45998	-31	2+4 PP (72, 42)	71 41	2009.97106	2009.97163	-57
2+4 PP (70, 27)	69 26	2008.46521	2008.46270	251	2+4 PP (73, 45)	72 44	2009.99953	2010.00037	-85
2+4 PP (71, 30)	70 29	2008.48237	2008.48123	114	2+4 RP (53, 15)	52 16	2010.00951	2010.00974	-23
2+4 PP (75, 42)	74 41	2008.56892	2008.56912	-21	2+4 PP (74, 48)	73 47	2010.02996	2010.02973	23
2+4 PP (76, 45)	75 44	2008.59664W	2008.59347	316	2+4 RP (52, 18)	51 19	2010.10891	2010.10932	-41
2+4 RP (57, 12)	56 13	2008.60710	2008.60707	3	2+4 PP (59, 6)	58 5	2010.20863	2010.20748	115
2+4 RP (56, 15)	55 16	2008.68705	2008.68783	-78	2+4 PP (60, 9)	59 8	2010.20863	2010.20857	6
2+4 RP (55, 18)	54 19	2008.79084	2008.79102	-18	2+4 PP (58, 3)	57 2	2010.21528	2010.21331	197
2+4 PP (63, 9)	62 8	2008.86101	2008.85893	208	2+4 PP (61, 12)	60 11	2010.21528	2010.21494	33
2+4 PP (64, 12)	63 11	2008.86101	2008.86092	9	2+4 PP (62, 15)	61 14	2010.22614	2010.22569	44
2+4 PP (62, 6)	61 5	2008.86101	2008.86226	-125	2+4 RP (51, 21)	50 22	2010.23554	2010.23678	-123

(I) The band type (2+4 and 225 correspond to $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$, respectively), the branch, (J lower and K lower) are reported.

(II) J upper and K upper

(III) Observed wavenumbers (in cm^{-1}).

(IV) Calculated wavenumbers (in cm^{-1}).

(.V) Observed – Calculated values (in 10^5 cm^{-1}).

Observed wavenumbers identified by a W in column (III) have not been included in the fit.

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PP(63,18)	62 17	2010.24099	2010.24013	86	2+4 PP(69,45)	68 44	2011.85532	2011.85491	41
2+4 RP(56, 3)	55 4	2010.24099	2010.24067	32	2+4 PP(70,48)	69 47	2011.88920	2011.89017	-98
2+4 PP(64,21)	63 20	2010.25773	2010.25769	4	2+4 PP(71,51)	70 50	2011.92547	2011.92592	-44
2+4 PP(65,24)	64 23	2010.27941	2010.27791	151	2+4 RP(47,21)	46 22	2011.96584	2011.96721	-137
2+4 PP(66,27)	65 26	2010.30093	2010.30038	56	2+4 PP(54, 3)	53 2	2011.97897	2011.97888	9
2+4 RP(54, 9)	53 10	2010.31376	2010.31468	-92	2+4 PP(55, 6)	54 5	2011.97897	2011.97918	-21
2+4 PP(67,30)	66 29	2010.32538	2010.32476	62	2+4 PP(56, 9)	55 8	2011.98645	2011.98619	27
2+4 PP(68,33)	67 32	2010.35104	2010.35077	27	2+4 RP(52, 3)	51 4	2011.99738	2011.99586	152
2+4 RP(53,12)	52 13	2010.37157	2010.37141	16	2+4 PP(57,12)	56 11	2011.99738	2011.99845	-106
2+4 PP(69,36)	68 35	2010.37864	2010.37814	50	2+4 PP(58,15)	57 14	2012.01651	2012.01508	143
2+4 PP(70,39)	69 38	2010.40888	2010.40664	224	2+4 PP(74,60)	73 59	2012.03610	2012.03496	114
2+4 PP(71,42)	70 41	2010.43753	2010.43608	144	2+4 PP(59,18)	58 17	2012.03610	2012.03540	70
2+4 RP(52,15)	51 16	2010.44642	2010.44716	-74	2+4 RP(50, 9)	49 10	2012.05862	2012.05839	23
2+4 PP(72,45)	71 44	2010.46556	2010.46630	-74	2+4 PP(60,21)	59 20	2012.05862	2012.05886	-24
2+4 PP(74,51)	73 50	2010.52725	2010.52843	-118	2+4 PP(61,24)	60 23	2012.08506	2012.08497	8
2+4 PP(58, 6)	57 5	2010.65464	2010.65276	188	2+4 PP(62,27)	61 26	2012.11330	2012.11334	-5
2+4 PP(59, 9)	58 8	2010.65464	2010.65533	-68	2+4 PP(63,30)	62 29	2012.14360	2012.14363	-4
2+4 PP(57, 3)	56 2	2010.65464	2010.65705	-241	2+4 PP(64,33)	63 32	2012.17575	2012.17555	21
2+4 PP(60,12)	59 11	2010.66381	2010.66317	64	2+4 RP(48,15)	47 16	2012.18125	2012.18071	54
2+4 RP(50,21)	49 22	2010.67158	2010.67183	-25	2+4 PP(65,36)	64 35	2012.20919	2012.20882	37
2+4 PP(61,15)	60 14	2010.67641	2010.67538	102	2+4 PP(66,39)	65 38	2012.24368	2012.24324	45
2+4 RP(55, 3)	54 4	2010.68213	2010.68186	27	2+4 PP(67,42)	66 41	2012.28024	2012.27859	165
2+4 PP(62,18)	61 17	2010.69235	2010.69129	107	2+4 PP(68,45)	67 44	2012.31387	2012.31472	-85
2+4 PP(63,21)	62 20	2010.71093	2010.71031	62	2+4 PP(69,48)	68 47	2012.35118	2012.35147	-29
2+4 PP(64,24)	63 23	2010.73295	2010.73200	96	2+4 RP(46,21)	45 22	2012.39505	2012.39573	-68
2+4 RP(53, 9)	52 10	2010.75056	2010.75299	-243	2+4 PP(53, 3)	52 2	2012.41678	2012.41634	44
2+4 PP(65,27)	64 26	2010.75584	2010.75594	-10	2+4 PP(54, 6)	53 5	2012.41678	2012.41817	-139
2+4 PP(66,30)	65 29	2010.78312	2010.78180	132	2+4 PP(71,54)	70 53	2012.42655	2012.42630	25
2+4 RP(52,12)	51 13	2010.80909	2010.80850	59	2+4 PP(55, 9)	54 8	2012.42655	2012.42666	-11
2+4 PP(67,33)	66 32	2010.80909	2010.80928	-19	2+4 RP(51, 3)	50 4	2012.43160	2012.43067	93
2+4 PP(68,36)	67 35	2010.83832	2010.83812	21	2+4 PP(56,12)	55 11	2012.44088	2012.44040	48
2+4 PP(69,39)	68 38	2010.86760	2010.86809	-49	2+4 PP(57,15)	56 14	2012.46042	2012.45852	190
2+4 RP(51,15)	50 16	2010.88269	2010.88297	-28	2+4 PP(58,18)	57 17	2012.48005	2012.48032	-27
2+4 PP(70,42)	69 41	2010.89902	2010.89901	1	2+4 RP(49, 9)	48 10	2012.48969	2012.49033	-64
2+4 PP(71,45)	70 44	2010.92977	2010.93070	-93	2+4 PP(59,21)	58 20	2012.50593	2012.50525	68
2+4 PP(72,48)	71 47	2010.96111	2010.96300	-189	2+4 PP(60,24)	59 23	2012.53329	2012.53285	44
2+4 RP(50,18)	49 19	2010.98013	2010.98011	2	2+4 RP(48,12)	47 13	2012.54021	2012.54076	-55
2+4 PP(57, 6)	56 5	2011.09882	2011.09647	235	2+4 PP(61,27)	60 26	2012.56307	2012.56271	36
2+4 PP(56, 3)	55 2	2011.09882	2011.09923	-41	2+4 PP(62,30)	61 29	2012.59460	2012.59448	12
2+4 PP(58, 9)	57 8	2011.09882	2011.10052	-170	2+4 RP(47,15)	46 16	2012.61013	2012.61005	8
2+4 PP(59,12)	58 11	2011.10933	2011.10983	-50	2+4 PP(63,33)	62 32	2012.62871	2012.62788	84
2+4 RP(54, 3)	53 4	2011.12313	2011.12145	168	2+4 PP(64,36)	63 35	2012.66275	2012.66264	11
2+4 PP(60,15)	59 14	2011.12313	2011.12351	-138	2+4 PP(65,39)	64 38	2012.69920W	2012.69416	503
2+4 PP(61,18)	60 17	2011.14249	2011.14089	161	2+4 PP(66,42)	65 41	2012.73574	2012.73538	35
2+4 PP(62,21)	61 20	2011.16118	2011.16139	-21	2+4 PP(67,45)	66 44	2012.77247	2012.77300	-53
2+4 PP(63,24)	62 23	2011.18497	2011.18454	42	2+4 PP(68,48)	67 47	2012.81055	2012.81123	-69
2+4 RP(52, 9)	51 10	2011.19044	2011.18971	73	2+4 RP(51, 0)	50 1	2012.81599	2012.81510	89
2+4 PP(64,27)	63 26	2011.20941	2011.20996	-55	2+4 RP(45,21)	44 22	2012.82295	2012.82261	34
2+4 PP(65,30)	64 29	2011.23765	2011.23729	36	2+4 PP(69,51)	68 50	2012.84929	2012.84995	-66
2+4 RP(51,12)	50 13	2011.24450	2011.24398	53	2+4 PP(52, 3)	51 2	2012.84929	2012.85222	-293
2+4 PP(66,33)	65 32	2011.26597	2011.26624	-28	2+4 PP(53, 6)	52 5	2012.85490	2012.85558	-68
2+4 PP(67,36)	66 35	2011.29617	2011.29656	-39	2+4 RP(50, 3)	49 4	2012.86422	2012.86388	34
2+4 RP(50,15)	49 16	2011.31759	2011.31717	42	2+4 PP(54, 9)	53 8	2012.86422	2012.86557	-134
2+4 PP(68,39)	67 38	2011.32913	2011.32801	112	2+4 PP(55,12)	54 11	2012.88144	2012.88079	65
2+4 PP(69,42)	68 41	2011.35957	2011.36041	-84	2+4 PP(70,54)	69 53	2012.88813	2012.88904	-91
2+4 PP(70,45)	69 44	2011.39204	2011.39357	-153	2+4 PP(56,15)	55 14	2012.90037	2012.90038	-1
2+4 RP(49,18)	48 19	2011.41296	2011.41307	-11	2+4 RP(48, 9)	47 10	2012.92368W	2012.92067	301
2+4 PP(71,48)	70 47	2011.42663	2011.42735	-72	2+4 PP(57,18)	56 17	2012.92368	2012.92367	1
2+4 PP(72,51)	71 50	2011.46060	2011.46161	-101	2+4 PP(58,21)	57 20	2012.95062	2012.95009	54
2+4 RP(48,21)	47 22	2011.53837	2011.53705	131	2+4 PP(72,60)	71 59	2012.96918	2012.96794	123
2+4 PP(56, 6)	55 5	2011.53837	2011.53861	-24	2+4 RP(47,12)	46 13	2012.96918	2012.96979	-61
2+4 PP(55, 3)	54 2	2011.53837	2011.53984	-147	2+4 PP(59,24)	58 23	2012.97923	2012.97917	7
2+4 PP(57, 9)	56 8	2011.54460	2011.54414	47	2+4 PP(60,27)	59 26	2013.01174	2013.01051	123
2+4 PP(58,12)	57 11	2011.55659	2011.55492	167	2+4 PP(61,30)	60 29	2013.04389	2013.04377	12
2+4 RP(53, 3)	52 4	2011.55659	2011.55945	-287	2+4 PP(62,33)	61 32	2013.07930	2013.07866	64
2+4 PP(59,15)	58 14	2011.57071	2011.57008	63	2+4 PP(63,36)	62 35	2013.11450	2013.11491	-40
2+4 PP(60,18)	59 17	2011.58913	2011.58893	21	2+4 RP(45,18)	44 19	2013.12746	2013.12864	-119
2+4 PP(61,21)	60 20	2011.61036	2011.61090	-54	2+4 PP(64,39)	63 38	2013.15198	2013.15230	-31
2+4 RP(51, 9)	50 10	2011.62441	2011.62485	-44	2+4 PP(65,42)	64 41	2013.18958	2013.19063	-105
2+4 PP(62,24)	61 23	2011.63596	2011.63553	42	2+4 PP(66,45)	65 44	2013.22918	2013.22974	-56
2+4 PP(63,27)	62 26	2011.66388	2011.66243	145	2+4 RP(44,21)	43 22	2013.24912	2013.24785	127
2+4 RP(50,12)	49 13	2011.67697	2011.67785	-88	2+4 RP(50, 0)	49 1	2013.24912	2013.24959	-47
2+4 PP(64,30)	63 29	2011.69224	2011.69124	101	2+4 PP(67,48)	66 47	2013.26990	2013.26946	44
2+4 PP(65,33)	64 32	2011.72246	2011.72167	79	2+4 PP(51, 3)	50 2	2013.28735	2013.28652	82
2+4 PP(66,36)	65 35	2011.75349	2011.75346	3	2+4 PP(52, 6)	51 5	2013.29380	2013.29141	239
2+4 PP(67,39)	66 38	2011.78700	2011.78639	60	2+4 RP(49, 3)	48 4	2013.29380	2013.29549	-169
2+4 PP(68,42)	67 41	2011.81973	2011.82027	-54	2+4 PP(53, 9)	52 8	2013.30303	2013.30289	14
2+4 RP(48,18)	47 19	2011.84364	2011.84441	-78	2+4 PP(68,51)	67 50	2013.31272W	2013.30967	305

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 PP(54,12)	53	11	2013.31996	2013.31960	36	2+4 RP(43,12)	42	13	2014.66937	2014.66971	-35
2+4 PP(55,15)	54	14	2013.34093	2013.34067	25	2+4 PP(65,51)	64	50	2014.68044	2014.67963	81
2+4 RP(47, 9)	46	10	2013.34914	2013.34941	-27	2+4 PP(53,18)	52	17	2014.68044	2014.68135	-91
2+4 PP(69,54)	68	53	2013.34914	2013.35026	-112	2+4 PP(54,21)	53	20	2014.71343	2014.71374	-31
2+4 PP(56,18)	55	17	2013.36574	2013.36545	29	2+4 PP(66,54)	65	53	2014.72478	2014.72472	7
2+4 PP(70,57)	69	56	2013.39308	2013.39112	197	2+4 RP(42,15)	41	16	2014.73157	2014.73234	-77
2+4 PP(57,21)	56	20	2013.39308	2013.39335	-27	2+4 PP(55,24)	54	23	2014.74819	2014.74880	-61
2+4 PP(58,24)	57	23	2013.42368	2013.42392	-24	2+4 PP(56,27)	55	26	2014.78608	2014.78612	-4
2+4 PP(71,60)	70	59	2013.43094	2013.43215	-122	2+4 PP(68,60)	67	59	2014.81797	2014.81563	234
2+4 PP(59,27)	58	26	2013.45707	2013.45676	32	2+4 RP(41,18)	40	19	2014.81797	2014.81805	-8
2+4 RP(45,15)	44	16	2013.46405	2013.46386	19	2+4 PP(57,30)	56	29	2014.82574	2014.82536	38
2+4 PP(60,30)	59	29	2013.49218	2013.49151	67	2+4 PP(58,33)	57	32	2014.86632	2014.86623	9
2+4 PP(61,33)	60	32	2013.52848	2013.52789	59	2+4 PP(59,36)	58	35	2014.90789	2014.90847	-58
2+4 PP(62,36)	61	35	2013.56588	2013.56563	26	2+4 RP(40,21)	39	22	2014.93326	2014.93230	96
2+4 PP(63,39)	62	38	2013.60486	2013.60451	36	2+4 PP(60,39)	59	38	2014.95124	2014.95184	-60
2+4 PP(64,42)	63	41	2013.64448	2013.64434	15	2+4 RP(46, 0)	45	1	2014.97194	2014.97128	66
2+4 RP(43,21)	42	22	2013.67048	2013.67144	-96	2+4 PP(61,42)	60	41	2014.99543	2014.99617	-74
2+4 RP(49, 0)	48	1	2013.68322	2013.68246	77	2+4 RP(45, 3)	44	4	2015.00677	2015.00588	89
2+4 PP(65,45)	64	44	2013.68322	2013.68493	-171	2+4 PP(47, 3)	46	2	2015.00677	2015.00788	-111
2+4 PP(50, 3)	49	2	2013.71888	2013.71924	-36	2+4 PP(48, 6)	47	5	2015.01880	2015.01889	-9
2+4 RP(48, 3)	47	4	2013.72530	2013.72550	-20	2+4 RP(44, 6)	43	7	2015.01880	2015.01965	-85
2+4 PP(51, 6)	50	5	2013.72530	2013.72566	-37	2+4 PP(49, 9)	48	8	2015.03632	2015.03635	-3
2+4 PP(66,48)	65	47	2013.72530	2013.72615	-86	2+4 PP(62,45)	61	44	2015.04187	2015.04127	61
2+4 PP(52, 9)	51	8	2013.73834	2013.73863	-29	2+4 RP(43, 9)	42	10	2015.04817	2015.04824	-7
2+4 RP(47, 6)	46	7	2013.74413	2013.74302	111	2+4 PP(50,12)	49	11	2015.05900	2015.05903	-3
2+4 PP(53,12)	52	11	2013.75683	2013.75683	0	2+4 PP(51,15)	50	14	2015.08616	2015.08608	8
2+4 PP(67,51)	66	50	2013.76759	2013.76786	-28	2+4 PP(63,48)	62	47	2015.08616	2015.08699	-83
2+4 RP(46, 9)	45	10	2013.77801	2013.77654	148	2+4 PP(52,18)	51	17	2015.11653	2015.11684	-31
2+4 PP(54,15)	53	14	2013.77801	2013.77939	-138	2+4 PP(64,51)	63	50	2015.13277	2015.13320	-44
2+4 PP(55,18)	54	17	2013.80679	2013.80566	114	2+4 PP(53,21)	52	20	2015.15133	2015.15073	61
2+4 RP(45,12)	44	13	2013.82298	2013.82300	-2	2+4 RP(41,15)	40	16	2015.15133	2015.15190	-57
2+4 PP(56,21)	55	20	2013.83552	2013.83505	47	2+4 PP(65,54)	64	53	2015.17927	2015.17980	-53
2+4 PP(57,24)	56	23	2013.86682	2013.86712	-29	2+4 PP(54,24)	53	23	2015.18722	2015.18728	-6
2+4 RP(44,15)	43	16	2013.88874	2013.88832	42	2+4 PP(55,27)	54	26	2015.22626	2015.22611	15
2+4 PP(70,60)	69	59	2013.89422	2013.89484	-62	2+4 PP(66,57)	65	56	2015.22626	2015.22667	-40
2+4 PP(58,27)	57	26	2013.90147	2013.90144	3	2+4 RP(40,18)	39	19	2015.23687	2015.23629	58
2+4 PP(59,30)	58	29	2013.93772	2013.93769	3	2+4 PP(56,30)	55	29	2015.26721	2015.26686	35
2+4 PP(60,33)	59	32	2013.97584	2013.97556	28	2+4 PP(67,60)	66	59	2015.27427	2015.27373	54
2+4 RP(43,18)	42	19	2013.97584	2013.97663	-79	2+4 PP(57,33)	56	32	2015.30865	2015.30923	-58
2+4 PP(61,36)	60	35	2014.01539	2014.01480	60	2+4 PP(68,63)	67	62	2015.31976	2015.32091	-115
2+4 PP(62,39)	61	38	2014.05552	2014.05517	35	2+4 PP(58,36)	57	35	2015.35290	2015.35297	-6
2+4 PP(63,42)	62	41	2014.09642	2014.09649	-8	2+4 RP(45, 0)	44	1	2015.39751	2015.39762	-11
2+4 RP(48, 0)	47	1	2014.11374	2014.11369	5	2+4 PP(59,39)	58	38	2015.39751	2015.39785	-34
2+4 PP(64,45)	63	44	2014.13872	2014.13859	13	2+4 RP(44, 3)	43	4	2015.43137	2015.42946	191
2+4 RP(47, 3)	46	4	2014.15260	2014.15390	-130	2+4 PP(46, 3)	45	2	2015.43137	2015.43424	-287
2+4 PP(50, 6)	49	5	2014.15894	2014.15833	62	2+4 RP(43, 6)	42	7	2015.44430	2015.44192	238
2+4 RP(46, 6)	45	7	2014.17138	2014.17020	118	2+4 PP(60,42)	59	41	2015.44430	2015.44368	63
2+4 PP(51, 9)	50	8	2014.17138	2014.17279	-141	2+4 PP(47, 6)	46	5	2015.44430	2015.44678	-248
2+4 PP(65,48)	64	47	2014.18148	2014.18131	17	2+4 PP(48, 9)	47	8	2015.46645	2015.46575	70
2+4 PP(52,12)	51	11	2014.19271	2014.19248	24	2+4 RP(42, 9)	41	10	2015.46645	2015.46930	-285
2+4 RP(45, 9)	44	10	2014.20177	2014.20205	-28	2+4 PP(49,12)	48	11	2015.48972	2015.48993	-21
2+4 PP(53,15)	52	14	2014.21552	2014.21654	-102	2+4 PP(61,45)	60	44	2015.48972	2015.49028	-56
2+4 PP(66,51)	65	50	2014.22381	2014.22452	-71	2+4 RP(41,12)	40	13	2015.50901	2015.50992	-92
2+4 PP(54,18)	53	17	2014.24470	2014.24429	40	2+4 PP(50,15)	49	14	2015.51845	2015.51848	-4
2+4 PP(67,54)	66	53	2014.26631	2014.26810	-179	2+4 PP(62,48)	61	47	2015.53756	2015.53751	5
2+4 PP(55,21)	54	20	2014.27573	2014.27518	55	2+4 PP(51,18)	50	17	2015.55108	2015.55074	34
2+4 PP(56,24)	55	23	2014.31037	2014.30874	163	2+4 RP(40,15)	39	16	2015.56974	2015.56982	-9
2+4 RP(43,15)	42	16	2014.31037	2014.31115	-77	2+4 PP(63,51)	62	50	2015.58587	2015.58523	64
2+4 PP(57,27)	56	26	2014.34486	2014.34457	30	2+4 PP(52,21)	51	20	2015.58587	2015.58613	-26
2+4 PP(69,60)	68	59	2014.35595	2014.35600	-5	2+4 PP(53,24)	52	23	2015.62431	2015.62420	11
2+4 PP(58,30)	57	29	2014.38213	2014.38231	-17	2+4 PP(64,54)	63	53	2015.63324	2015.63333	-9
2+4 RP(42,18)	41	19	2014.39857	2014.39816	41	2+4 RP(39,18)	38	19	2015.65236	2015.65288	-52
2+4 PP(59,33)	58	32	2014.42221	2014.42168	54	2+4 PP(54,27)	53	26	2015.66443	2015.66453	-10
2+4 PP(60,36)	59	35	2014.46271	2014.46241	30	2+4 PP(65,57)	64	56	2015.68065	2015.68172	-107
2+4 PP(61,39)	60	38	2014.50454	2014.50429	25	2+4 PP(55,30)	54	29	2015.70690	2015.70678	12
2+4 RP(41,21)	40	22	2014.51351	2014.51366	-15	2+4 PP(66,60)	65	59	2015.73041	2015.73029	12
2+4 RP(47, 0)	46	1	2014.54477	2014.54330	147	2+4 PP(56,33)	55	32	2015.75029	2015.75066	-37
2+4 PP(62,42)	61	41	2014.54477	2014.54711	-234	2+4 RP(38,21)	37	22	2015.76422	2015.76460	-38
2+4 PP(48, 3)	47	2	2014.58003	2014.57993	10	2+4 PP(67,63)	66	62	2015.77682	2015.77899	-218
2+4 RP(46, 3)	45	4	2014.58003	2014.58070	-67	2+4 PP(57,36)	56	35	2015.79634	2015.79590	44
2+4 PP(49, 6)	48	5	2014.59042	2014.58940	102	2+4 RP(44, 0)	43	1	2015.82246	2015.82232	13
2+4 PP(63,45)	62	44	2014.59042	2014.59070	-28	2+4 PP(58,39)	57	38	2015.84288	2015.84229	59
2+4 RP(45, 6)	44	7	2014.59597	2014.59574	23	2+4 RP(43, 3)	42	4	2015.85091	2015.85142	-51
2+4 PP(50, 9)	49	8	2014.60567	2014.60537	30	2+4 PP(45, 3)	44	2	2015.86097	2015.85901	196
2+4 RP(44, 9)	43	10	2014.62613	2014.62596	18	2+4 RP(42, 6)	41	7	2015.86097	2015.86255	-158
2+4 PP(51,12)	50	11	2014.62613	2014.62655	-41	2+4 PP(46, 6)	45	5	2015.87342	2015.87308	34
2+4 PP(64,48)	63	47	2014.63489	2014.63492	-3	2+4 PP(59,42)	58	41	2015.89135	2015.88963	172
2+4 PP(52,15)	51	14	2014.65173	2014.65210	-37	2+4 PP(47, 9)	46	8	2015.89135	2015.89356	-220

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PP(48,12)	47 11	2015.91927	2015.91924	3	2+4 PP(55,39)	54 38	2017.16680	2017.16626	54
2+4 RP(40,12)	39 13	2015.92731	2015.92758	-27	2+4 PP(44, 9)	43 8	2017.16680	2017.16740	-60
2+4 PP(60,45)	59 44	2015.93745	2015.93774	-29	2+4 PP(45,12)	44 11	2017.19758	2017.19762	-3
2+4 PP(49,15)	48 14	2015.94915	2015.94930	-15	2+4 PP(56,42)	55 41	2017.21741	2017.21814	-73
2+4 PP(50,18)	49 17	2015.98464	2015.98306	158	2+4 RP(36,15)	35 16	2017.22527	2017.22509	19
2+4 RP(39,15)	38 16	2015.98464	2015.98611	-147	2+4 PP(46,15)	45 14	2017.23165	2017.23221	-56
2+4 PP(61,48)	60 47	2015.98464	2015.98648	-184	2+4 PP(47,18)	46 17	2017.27054	2017.27051	3
2+4 PP(51,21)	50 20	2016.01961	2016.01996	-35	2+4 PP(57,45)	56 44	2017.27054	2017.27080	-26
2+4 PP(62,51)	61 50	2016.03604	2016.03572	32	2+4 RP(35,18)	34 19	2017.30121	2017.30274	-153
2+4 PP(52,24)	51 23	2016.06017	2016.05953	64	2+4 PP(48,21)	47 20	2017.31197	2017.31195	1
2+4 RP(38,18)	37 19	2016.06795	2016.06783	12	2+4 PP(58,48)	57 47	2017.32458	2017.32408	50
2+4 PP(63,54)	62 53	2016.08620	2016.08533	87	2+4 PP(49,24)	48 23	2017.35564	2017.35607	-43
2+4 PP(53,27)	52 26	2016.10128	2016.10137	-10	2+4 PP(59,51)	58 50	2017.37870	2017.37787	84
2+4 PP(64,57)	63 56	2016.13504	2016.13523	-18	2+4 PP(50,27)	49 26	2017.40293	2017.40245	48
2+4 PP(54,30)	53 29	2016.14540	2016.14514	26	2+4 PP(60,54)	59 53	2017.43204	2017.43204	1
2+4 PP(65,60)	64 59	2016.18500	2016.18532	-33	2+4 PP(51,30)	50 29	2017.45073	2017.45076	-3
2+4 PP(55,33)	54 32	2016.19088	2016.19052	36	2+4 PP(61,57)	60 56	2017.48535	2017.48649	-114
2+4 PP(66,63)	65 62	2016.23598	2016.23554	44	2+4 PP(52,33)	51 32	2017.50104	2017.50070	35
2+4 PP(56,36)	55 35	2016.23598	2016.23728	-130	2+4 RP(40, 0)	39 1	2017.50593	2017.50473	119
2+4 RP(43, 0)	42 1	2016.24522	2016.24539	-17	2+4 RP(39, 3)	38 4	2017.52271	2017.52310	-39
2+4 RP(42, 3)	41 4	2016.27205	2016.27177	28	2+4 RP(38, 6)	37 7	2017.52989	2017.52872	117
2+4 RP(41, 6)	40 7	2016.28331	2016.28155	176	2+4 PP(62,60)	61 59	2017.54156	2017.54116	41
2+4 PP(44, 3)	43 2	2016.28331	2016.28218	113	2+4 PP(41, 3)	40 2	2017.54156	2017.54207	-51
2+4 PP(57,39)	56 38	2016.28331	2016.28518	-186	2+4 PP(53,36)	52 35	2017.55169	2017.55200	-31
2+4 PP(45, 6)	44 5	2016.29768	2016.29778	-11	2+4 PP(42, 6)	41 5	2017.56261	2017.56228	33
2+4 RP(40, 9)	39 10	2016.30505	2016.30538	-32	2+4 RP(36,12)	35 13	2017.58183	2017.58184	0
2+4 PP(46, 9)	45 8	2016.31944	2016.31977	-33	2+4 PP(43, 9)	42 8	2017.58868	2017.58881	-14
2+4 PP(58,42)	57 41	2016.33423	2016.33403	21	2+4 PP(63,63)	62 62	2017.59590	2017.59595	-5
2+4 PP(47,12)	46 11	2016.34627	2016.34696	-69	2+4 PP(54,39)	53 38	2017.60439	2017.60445	-7
2+4 PP(48,15)	47 14	2016.37803	2016.37853	-50	2+4 PP(44,12)	43 11	2017.61994	2017.62055	-61
2+4 PP(59,45)	58 44	2016.38441	2016.38365	76	2+4 RP(35,15)	34 16	2017.63545	2017.63478	67
2+4 RP(38,15)	37 16	2016.39994	2016.40075	-81	2+4 PP(45,15)	44 14	2017.65676	2017.65666	10
2+4 PP(49,18)	48 17	2016.41358	2016.41380	-21	2+4 PP(55,42)	54 41	2017.65676	2017.65785	-109
2+4 PP(60,48)	59 47	2016.43417	2016.43390	27	2+4 PP(46,18)	45 17	2017.69616	2017.69648	-32
2+4 PP(50,21)	49 20	2016.45169	2016.45221	-52	2+4 RP(34,18)	33 19	2017.71152	2017.71106	46
2+4 PP(61,51)	60 50	2016.48411	2016.48465	-54	2+4 PP(56,45)	55 44	2017.71152	2017.71203	-50
2+4 PP(51,24)	50 23	2016.49328	2016.49329	-1	2+4 PP(47,21)	46 20	2017.73918	2017.73944	-26
2+4 PP(62,54)	61 53	2016.53610	2016.53578	32	2+4 PP(57,48)	56 47	2017.76742	2017.76683	59
2+4 PP(52,27)	51 26	2016.53610	2016.53664	-54	2+4 PP(48,24)	47 23	2017.78494	2017.78508	-13
2+4 PP(53,30)	52 29	2016.58159	2016.58192	-33	2+4 PP(58,51)	57 50	2017.82223	2017.82214	9
2+4 PP(63,57)	62 56	2016.58815	2016.58720	95	2+4 PP(49,27)	48 26	2017.83289	2017.83298	-10
2+4 PP(54,33)	53 32	2016.62834	2016.62882	-47	2+4 PP(59,54)	58 53	2017.87800	2017.87784	16
2+4 PP(64,60)	63 59	2016.63761	2016.63881	-120	2+4 PP(50,30)	49 29	2017.88271	2017.88282	-10
2+4 RP(42, 0)	41 1	2016.66701	2016.66681	19	2+4 RP(39, 0)	38 1	2017.92167	2017.92122	45
2+4 PP(55,36)	54 35	2016.67635	2016.67709	-74	2+4 PP(60,57)	59 56	2017.93516	2017.93382	134
2+4 RP(41, 3)	40 4	2016.69026	2016.69050	-24	2+4 PP(51,33)	50 32	2017.93516	2017.93427	89
2+4 PP(65,63)	64 62	2016.69026	2016.69055	-29	2+4 RP(38, 3)	37 4	2017.93516	2017.93696	-180
2+4 RP(40, 6)	39 7	2016.70094	2016.69892	202	2+4 RP(37, 6)	36 7	2017.94240	2017.94117	123
2+4 PP(43, 3)	42 2	2016.70094	2016.70375	-281	2+4 RP(36, 9)	35 10	2017.95858	2017.95876	-18
2+4 PP(44, 6)	43 5	2016.71955	2016.72088	-133	2+4 PP(40, 3)	39 2	2017.95858	2017.95882	-25
2+4 RP(39, 9)	38 10	2016.71955	2016.72117	-161	2+4 PP(41, 6)	40 5	2017.98017	2017.98057	-41
2+4 PP(56,39)	55 38	2016.72636	2016.72650	-14	2+4 PP(52,36)	51 35	2017.98871	2017.98710	161
2+4 PP(45, 9)	44 8	2016.74293	2016.74438	-145	2+4 PP(42, 9)	41 8	2018.00805	2018.00863	-58
2+4 RP(38,12)	37 13	2016.75660	2016.75799	-138	2+4 PP(53,39)	52 38	2018.04154	2018.04107	47
2+4 PP(46,12)	45 11	2016.77254	2016.77309	-54	2+4 PP(43,12)	42 11	2018.04154	2018.04188	-34
2+4 PP(57,42)	56 41	2016.77764	2016.77686	77	2+4 RP(34,15)	33 16	2018.04154	2018.04283	-128
2+4 PP(47,15)	46 14	2016.80645	2016.80616	29	2+4 PP(44,15)	43 14	2018.07853	2018.07952	-98
2+4 RP(37,15)	36 16	2016.81276	2016.81374	-98	2+4 PP(54,42)	53 41	2018.09611	2018.09599	12
2+4 PP(58,45)	57 44	2016.82737	2016.82800	-63	2+4 PP(45,18)	44 17	2018.12055	2018.12086	-30
2+4 PP(48,18)	47 17	2016.84412	2016.84295	117	2+4 PP(55,45)	54 44	2018.15208	2018.15170	38
2+4 PP(59,48)	58 47	2016.88064	2016.87977	87	2+4 PP(46,21)	45 20	2018.16514	2018.16534	-21
2+4 PP(49,21)	48 20	2016.88064	2016.88287	-223	2+4 PP(56,48)	55 47	2018.21136w	2018.20803	334
2+4 RP(36,18)	35 19	2016.89182	2016.89276	-94	2+4 PP(47,24)	46 23	2018.21136	2018.21250	-114
2+4 PP(50,24)	49 23	2016.92572	2016.92547	25	2+4 RP(32,21)	31 22	2018.22309	2018.22154	155
2+4 PP(60,51)	59 50	2016.93214	2016.93204	10	2+4 PP(48,27)	47 26	2018.26269	2018.26193	76
2+4 PP(51,27)	50 26	2016.97069	2016.97034	35	2+4 PP(57,51)	56 50	2018.26269	2018.26486	-216
2+4 PP(61,54)	60 53	2016.98454	2016.98468	-14	2+4 PP(49,30)	48 29	2018.31307	2018.31329	-22
2+4 PP(52,30)	51 29	2017.01708	2017.01713	-4	2+4 PP(58,54)	57 53	2018.32186	2018.32208	-22
2+4 PP(62,57)	61 56	2017.03785	2017.03762	23	2+4 RP(38, 0)	37 1	2018.33740	2018.33606	134
2+4 PP(53,33)	52 32	2017.06573	2017.06554	18	2+4 RP(37, 3)	36 4	2018.35089	2018.34920	169
2+4 RP(41, 0)	40 1	2017.08709	2017.08660	50	2+4 RP(36, 6)	35 7	2018.35089	2018.35197	-108
2+4 PP(63,60)	62 59	2017.09148	2017.09076	72	2+4 PP(50,33)	49 32	2018.36603	2018.36627	-25
2+4 RP(40, 3)	39 4	2017.10784	2017.10761	23	2+4 RP(35, 9)	34 10	2018.36603	2018.36802	-200
2+4 RP(39, 6)	38 7	2017.11499	2017.11464	35	2+4 PP(39, 3)	38 2	2018.37403	2018.37397	6
2+4 PP(54,36)	53 35	2017.11499	2017.11533	-34	2+4 PP(59,57)	58 56	2018.38050	2018.37959	90
2+4 PP(42, 3)	41 2	2017.12436	2017.12371	64	2+4 PP(40, 6)	39 5	2018.39681	2018.39725	-44
2+4 RP(38, 9)	37 10	2017.13486	2017.13533	-48	2+4 PP(51,36)	50 35	2018.42068	2018.42062	5
2+4 PP(43, 6)	42 5	2017.14260	2017.14239	21	2+4 PP(41, 9)	40 8	2018.42690	2018.42683	6

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 PP(60,60)	59	59	2018.43748	2018.43731	17	2+4 PP(48,36)	47	35	2019.71102	2019.71173	-71
2+4 RP(33,15)	32	16	2018.45046	2018.44922	124	2+4 RP(29,18)	28	19	2019.72824	2019.72771	53
2+4 PP(42,12)	41	11	2018.46102	2018.46161	-60	2+4 PP(40,15)	39	14	2019.75457	2019.75493	-36
2+4 PP(52,39)	51	38	2018.47651	2018.47612	39	2+4 PP(49,39)	48	38	2019.77224	2019.77182	43
2+4 PP(43,15)	42	14	2018.50037	2018.50077	-41	2+4 PP(41,18)	40	17	2019.80187	2019.80239	-52
2+4 RP(32,18)	31	19	2018.52237	2018.52272	-35	2+4 PP(50,42)	49	41	2019.83316	2019.83286	30
2+4 PP(53,42)	52	41	2018.53333	2018.53257	76	2+4 PP(42,21)	41	20	2019.85269	2019.85301	-32
2+4 PP(44,18)	43	17	2018.54338	2018.54364	-26	2+4 PP(51,45)	50	44	2019.89495	2019.89468	27
2+4 PP(45,21)	44	20	2018.58968	2018.58965	3	2+4 PP(43,24)	42	23	2019.90570	2019.90630	-59
2+4 PP(54,45)	53	44	2018.58968	2018.58980	-11	2+4 PP(52,48)	51	47	2019.95950	2019.95714	237
2+4 PP(46,24)	45	23	2018.63771	2018.63834	-63	2+4 PP(44,27)	43	26	2019.95950	2019.96185	-235
2+4 PP(55,48)	54	47	2018.64822	2018.64765	57	2+4 RP(32, 6)	31	7	2019.97988	2019.97875	113
2+4 PP(47,27)	46	26	2018.68914	2018.68930	-16	2+4 RP(34, 0)	33	1	2019.97988	2019.97888	100
2+4 PP(56,51)	55	50	2018.70620	2018.70602	18	2+4 RP(33, 3)	32	4	2019.97988	2019.98185	-197
2+4 PP(48,30)	47	29	2018.74221	2018.74218	3	2+4 RP(31, 9)	30	10	2019.98928	2019.98865	63
2+4 RP(37, 0)	36	1	2018.74900	2018.74925	-25	2+4 PP(35, 3)	34	2	2020.01932	2020.01838	93
2+4 RP(36, 3)	35	4	2018.76103	2018.75981	122	2+4 PP(45,30)	44	29	2020.01932	2020.01934	-2
2+4 RP(35, 6)	34	7	2018.76103	2018.76113	-10	2+4 PP(53,51)	52	50	2020.01932	2020.02010	-78
2+4 PP(57,54)	56	53	2018.76556	2018.76477	79	2+4 PP(36, 6)	35	5	2020.04759	2020.04786	-27
2+4 RP(34, 9)	33	10	2018.77550	2018.77564	-14	2+4 RP(29,15)	28	16	2020.05956	2020.05821	136
2+4 PP(38, 3)	37	2	2018.78759	2018.78749	19	2+4 PP(46,33)	45	32	2020.07837	2020.07845	-8
2+4 PP(49,33)	48	32	2018.79688	2018.79669	10	2+4 PP(54,54)	53	53	2020.08396	2020.08345	51
2+4 RP(33,12)	32	13	2018.80511	2018.80529	-17	2+4 PP(37, 9)	36	8	2020.08396	2020.08357	39
2+4 PP(39, 6)	38	5	2018.81203	2018.81233	-30	2+4 PP(38,12)	37	11	2020.12434	2020.12448	-14
2+4 PP(58,57)	57	56	2018.82395	2018.82381	14	2+4 PP(47,36)	46	35	2020.13918	2020.13893	25
2+4 PP(40, 9)	39	8	2018.84294	2018.84343	-49	2+4 PP(39,15)	38	14	2020.16963	2020.16977	-14
2+4 PP(50,36)	49	35	2018.85286	2018.85257	28	2+4 PP(48,39)	47	38	2020.20034	2020.20056	-22
2+4 RP(32,15)	31	16	2018.85286	2018.85395	-110	2+4 PP(40,18)	39	17	2020.21830	2020.21878	-48
2+4 PP(41,12)	40	11	2018.87919	2018.87974	-55	2+4 PP(49,42)	48	41	2020.26369	2020.26314	55
2+4 PP(51,39)	50	38	2018.90979	2018.90960	19	2+4 PP(41,21)	40	20	2020.27027	2020.27093	-66
2+4 PP(42,15)	41	14	2018.92016	2018.92043	-27	2+4 PP(42,24)	41	23	2020.32616	2020.32576	41
2+4 RP(31,18)	30	19	2018.92754	2018.92605	148	2+4 PP(50,45)	49	44	2020.32616	2020.32650	-33
2+4 PP(43,18)	42	17	2018.96596	2018.96482	113	2+4 RP(31, 6)	30	7	2020.38322	2020.38133	189
2+4 PP(52,42)	51	41	2018.96596	2018.96757	-162	2+4 PP(43,27)	42	26	2020.38322	2020.38285	37
2+4 PP(44,21)	43	20	2019.01262	2019.01237	25	2+4 RP(33, 0)	32	1	2020.38322	2020.38544	-222
2+4 PP(53,45)	52	44	2019.02689	2019.02633	56	2+4 RP(32, 3)	31	4	2020.38322	2020.38592	-270
2+4 RP(30,21)	29	22	2019.02689	2019.02714	-26	2+4 RP(30, 9)	29	10	2020.39107	2020.38969	138
2+4 PP(45,24)	44	23	2019.06239	2019.06259	-20	2+4 PP(51,48)	50	47	2020.39107	2020.39049	58
2+4 PP(54,48)	53	47	2019.08595	2019.08572	23	2+4 RP(29,12)	28	13	2020.41371	2020.41345	26
2+4 PP(46,27)	45	26	2019.11504	2019.11507	-3	2+4 PP(34, 3)	33	2	2020.42589	2020.42544	45
2+4 PP(55,51)	54	50	2019.14706	2019.14561	145	2+4 PP(44,30)	43	29	2020.44186	2020.44188	-1
2+4 RP(36, 0)	35	1	2019.16105	2019.16078	27	2+4 PP(52,51)	51	50	2020.45604	2020.45499	105
2+4 RP(34, 6)	33	7	2019.16919	2019.16865	55	2+4 RP(28,15)	27	16	2020.45604	2020.45630	-26
2+4 RP(35, 3)	34	4	2019.16919	2019.16879	41	2+4 PP(35, 6)	34	5	2020.45604	2020.45646	-42
2+4 PP(47,30)	46	29	2019.16919	2019.16949	-29	2+4 PP(36, 9)	35	8	2020.49339	2020.49372	-33
2+4 RP(33, 9)	32	10	2019.18198	2019.18162	36	2+4 PP(45,33)	44	32	2020.50233	2020.50253	-19
2+4 PP(37, 3)	36	2	2019.19943	2019.19941	2	2+4 RP(27,18)	26	19	2020.52395	2020.52268	127
2+4 PP(56,54)	55	53	2019.20701	2019.20589	112	2+4 PP(37,12)	36	11	2020.53551	2020.53617	-66
2+4 PP(48,33)	47	32	2019.22571	2019.22553	18	2+4 PP(46,36)	45	35	2020.56456	2020.56455	1
2+4 PP(38, 6)	37	5	2019.22571	2019.22578	-8	2+4 PP(38,15)	37	14	2020.58258	2020.58301	-43
2+4 RP(31,15)	30	16	2019.25806	2019.25703	103	2+4 PP(47,39)	46	38	2020.62798	2020.62772	27
2+4 PP(39, 9)	38	8	2019.25806	2019.25843	-36	2+4 PP(39,18)	38	17	2020.63345	2020.63355	-11
2+4 PP(57,57)	56	56	2019.26713	2019.26647	66	2+4 PP(40,21)	39	20	2020.68698	2020.68725	-26
2+4 PP(49,36)	48	35	2019.28302	2019.28294	8	2+4 PP(48,42)	47	41	2020.69231	2020.69183	48
2+4 PP(40,12)	39	11	2019.29547	2019.29626	-79	2+4 PP(41,24)	40	23	2020.74332	2020.74362	-30
2+4 RP(30,18)	29	19	2019.32951	2019.32772	179	2+4 PP(49,45)	48	44	2020.75745	2020.75673	71
2+4 PP(41,15)	40	14	2019.33962	2019.33848	114	2+4 RP(30, 6)	29	7	2020.78219	2020.78226	-7
2+4 PP(50,39)	49	38	2019.33962	2019.34150	-188	2+4 RP(31, 3)	30	4	2020.78937	2020.78836	101
2+4 PP(42,18)	41	17	2019.38438	2019.38441	-4	2+4 RP(29, 9)	28	10	2020.78937	2020.78909	28
2+4 PP(51,42)	50	41	2019.40149	2019.40100	49	2+4 RP(32, 0)	31	1	2020.78937	2020.79033	-97
2+4 PP(43,21)	42	20	2019.43326	2019.43349	-23	2+4 PP(42,27)	41	26	2020.80199	2020.80226	-26
2+4 PP(52,45)	51	44	2019.46203	2019.46129	74	2+4 RP(28,12)	27	13	2020.81153	2020.81135	18
2+4 PP(44,24)	43	23	2019.48474	2019.48524	-50	2+4 PP(50,48)	49	47	2020.82309	2020.82227	83
2+4 PP(53,48)	52	47	2019.52249	2019.52221	28	2+4 PP(33, 3)	32	2	2020.83028	2020.83087	-60
2+4 PP(45,27)	44	26	2019.53906	2019.53926	-20	2+4 PP(43,30)	42	29	2020.86283	2020.86282	1
2+4 RP(35, 0)	34	1	2019.57359	2019.57066	293	2+4 PP(34, 6)	33	5	2020.86283	2020.86345	-62
2+4 RP(33, 6)	32	7	2019.57359	2019.57452	-93	2+4 PP(51,51)	50	50	2020.88913	2020.88831	83
2+4 RP(34, 3)	33	4	2019.57359	2019.57613	-254	2+4 PP(35, 9)	34	8	2020.90251	2020.90225	25
2+4 PP(54,51)	53	50	2019.58458	2019.58364	94	2+4 RP(26,18)	25	19	2020.91828	2020.91765	63
2+4 RP(32, 9)	31	10	2019.58458	2019.58596	-138	2+4 PP(44,33)	43	32	2020.92503	2020.92502	1
2+4 PP(46,30)	45	29	2019.59522	2019.59521	1	2+4 PP(36,12)	35	11	2020.94591	2020.94625	-34
2+4 PP(36, 3)	35	2	2019.60952	2019.60971	-18	2+4 PP(45,36)	44	35	2020.98864	2020.98858	6
2+4 PP(37, 6)	36	5	2019.63763	2019.63763	0	2+4 PP(37,15)	36	14	2020.99474	2020.99463	11
2+4 PP(55,54)	54	53	2019.64602	2019.64545	57	2+4 PP(38,18)	37	17	2021.04648	2021.04672	-24
2+4 PP(47,33)	46	32	2019.65303	2019.65278	25	2+4 PP(46,39)	45	38	2021.05352	2021.05329	23
2+4 RP(30,15)	29	16	2019.65930	2019.65845	85	2+4 PP(39,21)	38	20	2021.10163	2021.10196	-33
2+4 PP(38, 9)	37	8	2019.67174	2019.67180	-7	2+4 PP(47,42)	46	41	2021.11903	2021.11895	9
2+4 PP(39,12)	38	11	2019.71102	2019.71118	-16	2+4 PP(40,24)	39	23	2021.15933	2021.15988	-55

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2+4	PP (48, 45)	47	44	2021.18673	2021.18539	134		2+4	PP (42, 39)	41	38	2022.74028	2022.73968	60					
2+4	RP (28, 9)	27	10	2021.18673	2021.18683	-10		2+4	PP (35, 21)	34	20	2022.74487	2022.74473	13					
2+4	RP (30, 3)	29	4	2021.18673	2021.18915	-242		2+4	RP (24, 9)	23	10	2022.76197	2022.76125	73					
2+4	RP (31, 0)	30	1	2021.19340	2021.19357	-17		2+4	RP (25, 6)	24	7	2022.76197	2022.76214	-17					
2+4	RP (27, 12)	26	13	2021.20858	2021.20759	99		2+4	RP (26, 3)	25	4	2022.77617	2022.77589	28					
2+4	PP (41, 27)	40	26	2021.21986	2021.22006	-21		2+4	RP (23, 12)	22	13	2022.77617	2022.77593	24					
2+4	PP (32, 3)	31	2	2021.23422	2021.23468	-46		2+4	RP (27, 0)	26	1	2022.79030	2022.78983	48					
2+4	PP (49, 48)	48	47	2021.25333	2021.25247	87		2+4	PP (36, 24)	35	23	2022.81005	2022.80886	119					
2+4	PP (33, 6)	32	5	2021.26866	2021.26881	-15		2+4	RP (22, 15)	21	16	2022.81005	2022.80979	26					
2+4	PP (42, 30)	41	29	2021.28138	2021.28217	-79		2+4	PP (43, 42)	42	41	2022.81005	2022.81154	-149					
2+4	PP (34, 9)	33	8	2021.30890	2021.30917	-27		2+4	PP (28, 3)	27	2	2022.83299	2022.83361	-62					
2+4	PP (43, 33)	42	32	2021.34583	2021.34591	-9		2+4	PP (29, 6)	28	5	2022.87446	2022.87400	46					
2+4	PP (35, 12)	34	11	2021.35422	2021.35471	-49		2+4	PP (37, 27)	36	26	2022.87446	2022.87526	-80					
2+4	PP (36, 15)	35	14	2021.40413	2021.40464	-51		2+4	PP (30, 9)	29	8	2022.92042	2022.92058	-16					
2+4	PP (44, 36)	43	35	2021.41129	2021.41102	27		2+4	PP (38, 30)	37	29	2022.94338	2022.94358	-20					
2+4	PP (37, 18)	36	17	2021.45783	2021.45828	-45		2+4	PP (31, 12)	30	11	2022.97182	2022.97236	-54					
2+4	PP (45, 39)	44	38	2021.47752	2021.47727	25		2+4	PP (39, 33)	38	32	2023.01349	2023.01353	-4					
2+4	PP (38, 21)	37	20	2021.51482	2021.51507	-24		2+4	PP (32, 15)	31	14	2023.02803	2023.02851	-48					
2+4	PP (46, 42)	45	41	2021.54505	2021.54448	57		2+4	PP (40, 36)	39	35	2023.08635	2023.08484	151					
2+4	PP (39, 24)	38	23	2021.57418	2021.57453	-36		2+4	PP (33, 18)	32	17	2023.08635	2023.08838	-203					
2+4	RP (28, 6)	27	7	2021.58064	2021.57917	147		2+4	RP (23, 9)	22	10	2023.15107	2023.15070	37					
2+4	RP (29, 3)	28	4	2021.58726	2021.58830	-104		2+4	PP (34, 21)	33	20	2023.15107	2023.15140	-33					
2+4	RP (30, 0)	29	1	2021.59544	2021.59514	30		2+4	RP (24, 6)	23	7	2023.15107	2023.15316	-209					
2+4	RP (26, 12)	25	13	2021.60268	2021.60217	51		2+4	PP (41, 39)	40	38	2023.15773	2023.15730	43					
2+4	PP (47, 45)	46	44	2021.61321	2021.61246	74		2+4	RP (22, 12)	21	13	2023.16514	2023.16385	129					
2+4	PP (40, 27)	39	26	2021.63637	2021.63627	10		2+4	RP (25, 3)	24	4	2023.16861	2023.16845	15					
2+4	PP (31, 3)	30	2	2021.63637	2021.63686	-49		2+4	RP (26, 0)	25	1	2023.18513	2023.18471	42					
2+4	PP (32, 6)	31	5	2021.67209	2021.67255	-46		2+4	RP (21, 15)	20	16	2023.19652	2023.19618	33					
2+4	PP (48, 48)	47	47	2021.68195	2021.68109	86		2+4	PP (35, 24)	34	23	2023.21681	2023.21709	-27					
2+4	PP (41, 30)	40	29	2021.69949	2021.69993	-43		2+4	PP (27, 3)	26	2	2023.23051	2023.22926	126					
2+4	PP (33, 9)	32	8	2021.71431	2021.71446	-15		2+4	PP (42, 42)	41	41	2023.23051	2023.23071	-20					
2+4	PP (34, 12)	33	11	2021.76168	2021.76156	12		2+4	PP (28, 6)	27	5	2023.27089	2023.27122	-33					
2+4	PP (42, 33)	41	32	2021.76461	2021.76521	-60		2+4	PP (36, 27)	35	26	2023.28469	2023.28504	-36					
2+4	PP (35, 15)	34	14	2021.81260	2021.81303	-43		2+4	PP (29, 9)	28	8	2023.31882	2023.31937	-55					
2+4	PP (43, 36)	42	35	2021.83192	2021.83187	5		2+4	PP (37, 30)	36	29	2023.35492	2023.35492	-1					
2+4	PP (36, 18)	35	17	2021.86778	2021.86823	-45		2+4	PP (30, 12)	29	11	2023.37229	2023.37271	-42					
2+4	PP (44, 39)	43	38	2021.90015	2021.89967	48		2+4	PP (38, 33)	37	32	2023.42761	2023.42643	118					
2+4	PP (37, 21)	36	20	2021.92625	2021.92657	-32		2+4	PP (31, 15)	30	14	2023.42761	2023.43043	-282					
2+4	PP (45, 42)	44	41	2021.96893	2021.96842	51		2+4	PP (32, 18)	31	17	2023.49144	2023.49186	-42					
2+4	PP (27, 6)	26	7	2021.97705	2021.97515	190		2+4	PP (39, 36)	38	35	2023.49947	2023.49930	17					
2+4	RP (26, 9)	25	10	2021.97705	2021.97735	-30		2+4	RP (22, 9)	21	10	2023.53882	2023.53849	32					
2+4	RP (28, 3)	27	4	2021.98674	2021.98581	93		2+4	RP (23, 6)	22	7	2023.54455	2023.54251	204					
2+4	PP (38, 24)	37	23	2021.98674	2021.98758	-85		2+4	PP (33, 21)	32	20	2023.55607	2023.55644	-37					
2+4	RP (29, 0)	28	1	2021.99532	2021.99504	28		2+4	RP (24, 3)	23	4	2023.55607W	2023.55937	-330					
2+4	RP (25, 12)	24	13	2021.99532	2021.99509	22		2+4	PP (40, 39)	39	38	2023.57384	2023.57332	52					
2+4	PP (30, 3)	29	2	2022.03811	2022.03741	70		2+4	RP (25, 0)	24	1	2023.57927	2023.57793	134					
2+4	PP (46, 45)	45	44	2022.03811	2022.03795	16		2+4	RP (20, 15)	19	16	2023.57927	2023.58089	-162					
2+4	PP (39, 27)	38	26	2022.05032	2022.05087	-55		2+4	PP (26, 3)	25	2	2023.62340	2023.62327	13					
2+4	PP (31, 6)	30	5	2022.07462	2022.07467	-5		2+4	PP (34, 24)	33	23	2023.62340	2023.62370	-30					
2+4	RP (23, 18)	22	19	2022.09325	2022.09249	76		2+4	PP (27, 6)	26	5	2023.66646	2023.66680	-34					
2+4	PP (40, 30)	39	29	2022.11663	2022.11608	54		2+4	PP (35, 27)	34	26	2023.69284	2023.69322	-38					
2+4	PP (32, 9)	31	8	2022.11663	2022.11813	-150		2+4	PP (28, 9)	27	8	2023.71591	2023.71652	-61					
2+4	PP (33, 12)	32	11	2022.16666	2022.16678	-12		2+4	PP (36, 30)	35	29	2023.76432	2023.76466	-34					
2+4	PP (41, 33)	40	32	2022.18306	2022.18292	14		2+4	PP (29, 12)	28	11	2023.77127	2023.77143	-16					
2+4	PP (34, 15)	33	14	2022.21941	2022.21981	-40		2+4	PP (30, 15)	29	14	2023.83041	2023.83072	-31					
2+4	PP (42, 36)	41	35	2022.25106	2022.25112	-7		2+4	PP (37, 33)	36	32	2023.83785	2023.83773	12					
2+4	PP (35, 18)	34	17	2022.27638	2022.27656	-18		2+4	PP (31, 18)	30	17	2023.89337	2023.89372	-35					
2+4	PP (43, 39)	42	38	2022.32087	2022.32047	40		2+4	PP (38, 36)	37	35	2023.91239	2023.91216	23					
2+4	PP (36, 21)	35	20	2022.33626	2022.33646	-19		2+4	RP (21, 9)	20	10	2023.92348	2023.92462	-115					
2+4	RP (26, 6)	25	7	2022.37042	2022.36947	95		2+4	RP (22, 6)	21	7	2023.93095	2023.93021	75					
2+4	RP (25, 9)	24	10	2022.37042	2022.37013	30		2+4	RP (20, 12)	19	13	2023.93646	2023.93467	179					
2+4	RP (27, 3)	26	4	2022.38178	2022.38167	11		2+4	RP (23, 3)	22	4	2023.94953	2023.94863	90					
2+4	PP (44, 42)	43	41	2022.39156	2022.39077	79		2+4	PP (32, 21)	31	20	2023.95946	2023.95987	-41					
2+4	RP (28, 0)	27	1	2022.39156	2022.39327	-171		2+4	RP (24, 0)	23	1	2023.96971	2023.96946	25					
2+4	PP (37, 24)	36	23	2022.39871	2022.39903	-32		2+4	PP (39, 39)	38	38	2023.98819	2023.98774	46					
2+4	RP (23, 15)	22	16	2022.42309	2022.42173	137		2+4	PP (25, 3)	24	2	2024.01532	2024.01564	-31					
2+4	PP (29, 3)	28	2	2022.43628	2022.43633	-5		2+4	PP (33, 24)	32	23	2024.02827	2024.02869	-42					
2+4	PP (45, 45)	44	44	2022.46301	2022.46186	115		2+4	PP (26, 6)	25	5	2024.06059	2024.06075	-16					
2+4	PP (38, 27)	37	26	2022.46301	2022.46387	-86		2+4	PP (34, 27)	33	26	2024.09951							

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 PP(37,36)	36	35	2024.32358	2024.32341	16	2+4 RQ(61,33)	61	34	2026.20465	2026.20366	99
2+4 RP(22, 3)	21	4	2024.33704	2024.33623	81	2+4 RP(15, 9)	14	10	2026.20465	2026.20634	-169
2+4 RP(23, 0)	22	1	2024.36068	2024.35932	136	2+4 RP(16, 6)	15	7	2026.21769W	2026.22144	-375
2+4 PP(31,21)	30	20	2024.36068	2024.36168	-100	2+4 RP(17, 3)	16	4	2026.24957	2026.24938	20
2+4 PP(24, 3)	23	2	2024.40606	2024.40636	-30	2+4 RQ(60,36)	60	37	2026.25557	2026.25441	116
2+4 PP(32,24)	31	23	2024.43171	2024.43207	-36	2+4 PP(25,18)	24	17	2026.27019	2026.27074	-55
2+4 PP(25, 6)	24	5	2024.45316	2024.45306	10	2+4 RP(18, 0)	17	1	2026.28367	2026.28336	31
2+4 PP(33,27)	32	26	2024.50490	2024.50473	17	2+4 RQ(60,33)	60	34	2026.31141	2026.31167	-26
2+4 PP(26, 9)	25	8	2024.50490	2024.50593	-103	2+4 PP(19, 3)	18	2	2026.33527	2026.33531	-4
2+4 PP(27,12)	26	11	2024.56355	2024.56399	-44	2+4 PP(26,21)	25	20	2026.34603	2026.34636	-33
2+4 PP(34,30)	33	29	2024.57915	2024.57930	-15	2+4 PP(20, 6)	19	5	2026.38970	2026.38996	-26
2+4 PP(28,15)	27	14	2024.62601	2024.62643	-41	2+4 PP(27,24)	26	23	2026.42427	2026.42464	-38
2+4 PP(35,33)	34	32	2024.65547	2024.65550	-2	2+4 RQ(64,24)	64	25	2026.43820	2026.43820	-1
2+4 RP(19, 9)	18	10	2024.69206	2024.69188	19	2+4 RQ(60,30)	60	31	2026.44056	2026.43994	61
2+4 PP(29,18)	28	17	2024.69206	2024.69258	-51	2+4 PP(21, 9)	20	8	2026.45053	2026.45078	-25
2+4 RP(18,12)	17	13	2024.70032	2024.69880	152	2+4 RQ(58,36)	58	37	2026.46852	2026.46799	53
2+4 RP(20, 6)	19	7	2024.70032	2024.70061	-29	2+4 PP(28,27)	27	26	2026.50488	2026.50518	-30
2+4 RP(21, 3)	20	4	2024.72218	2024.72218	0	2+4 PP(22,12)	21	11	2026.51649	2026.51677	-29
2+4 PP(36,36)	35	35	2024.73323	2024.73306	17	2+4 RQ(58,33)	58	34	2026.52380	2026.52254	126
2+4 RP(22, 0)	21	1	2024.74806	2024.74749	57	2+4 RQ(59,30)	59	31	2026.54569	2026.54506	63
2+4 PP(30,21)	29	20	2024.76137	2024.76187	-49	2+4 RQ(57,36)	57	37	2026.57091	2026.57218	-128
2+4 PP(23, 3)	22	2	2024.79510	2024.79545	-35	2+4 PP(23,15)	22	14	2026.58674	2026.58714	-40
2+4 PP(31,24)	30	23	2024.83339	2024.83383	-44	2+4 RQ(68,18)	68	19	2026.58674	2026.58723	-49
2+4 PP(24, 6)	23	5	2024.84351	2024.84373	-22	2+4 RQ(57,39)	57	40	2026.60149	2026.59972	176
2+4 PP(25, 9)	24	8	2024.89767	2024.89818	-51	225 RQ(58,42)	58	43	2026.60804	2026.60713	92
2+4 PP(32,27)	31	26	2024.90769	2024.90806	-37	2+4 RP(16, 3)	15	4	2026.62748	2026.62702	46
2+4 PP(26,12)	25	11	2024.95767	2024.95782	-15	2+4 RQ(58,30)	58	31	2026.64807	2026.64847	-40
2+4 PP(33,30)	32	29	2024.98423	2024.98420	3	2+4 PP(24,18)	23	17	2026.66096	2026.66121	-25
2+4 PP(27,15)	26	14	2025.02159	2025.02184	-25	2+4 RP(17, 0)	16	1	2026.66096	2026.66311	-216
2+4 PP(34,33)	33	32	2025.06194	2025.06197	-3	2+4 RQ(56,36)	56	37	2026.67623	2026.67464	159
2+4 RP(18, 9)	17	10	2025.07324	2025.07300	23	2+4 RQ(70,15)	70	16	2026.69987	2026.69875	112
2+4 RP(19, 6)	18	7	2025.08357	2025.08332	25	2+4 RQ(67,18)	67	19	2026.70377	2026.70257	120
2+4 PP(28,18)	27	17	2025.08943	2025.08956	-13	2+4 RQ(56,39)	56	40	2026.70377	2026.70362	15
2+4 RP(20, 3)	19	4	2025.10714	2025.10647	67	2+4 PP(18, 3)	17	2	2026.71626	2026.71614	11
2+4 RP(21, 0)	20	1	2025.13471	2025.13399	72	2+4 PP(25,21)	24	20	2026.73819	2026.73841	-23
2+4 PP(29,21)	28	20	2025.15996	2025.16043	-47	2+4 RQ(57,30)	57	31	2026.75061	2026.75018	43
2+4 PP(22, 3)	21	2	2025.18276	2025.18288	-12	2+4 RQ(61,24)	61	25	2026.76290	2026.76318	-28
2+4 PP(23, 6)	22	5	2025.23325	2025.23276	50	2+4 PP(19, 6)	18	5	2026.77239	2026.77240	-1
2+4 PP(30,24)	29	23	2025.23325	2025.23397	-71	2+4 RQ(55,39)	55	40	2026.80620	2026.80576	44
2+4 PP(24, 9)	23	8	2025.28895	2025.28879	16	2+4 RQ(66,18)	66	19	2026.81784	2026.81626	158
2+4 PP(31,27)	30	26	2025.30939	2025.30977	-38	2+4 RQ(69,15)	69	16	2026.81784	2026.81689	95
2+4 PP(25,12)	24	11	2025.34961	2025.35002	-40	2+4 PP(26,24)	25	23	2026.81784	2026.81828	-44
2+4 PP(32,30)	31	29	2025.38726	2025.38749	-22	2+4 PP(20, 9)	19	8	2026.83462	2026.83482	-20
2+4 PP(26,15)	25	14	2025.41517	2025.41561	-44	2+4 RQ(58,27)	58	28	2026.83462	2026.83536	-74
2+4 RP(17, 9)	16	10	2025.45553W	2025.45246	307	2+4 RQ(60,24)	60	25	2026.86992	2026.86815	177
2+4 RP(16,12)	15	13	2025.45553	2025.45622	-69	2+4 RQ(54,36)	54	37	2026.87561	2026.87431	130
2+4 RP(18, 6)	17	7	2025.46652	2025.46436	216	2+4 PP(27,27)	26	26	2026.90080	2026.90041	40
2+4 PP(33,33)	32	32	2025.46652	2025.46683	-31	2+4 PP(21,12)	20	11	2026.90080	2026.90241	-161
2+4 PP(27,18)	26	17	2025.48436	2025.48492	-56	2+4 RQ(62,21)	62	22	2026.93792	2026.93869	-76
2+4 RP(19, 3)	18	4	2025.49058	2025.48910	148	2+4 RQ(55,30)	55	31	2026.94884	2026.94848	36
2+4 RP(20, 0)	19	1	2025.51844	2025.51880	-36	2+4 RP(13, 9)	12	10	2026.95446	2026.95352	93
2+4 PP(28,21)	27	20	2025.55721	2025.55737	-16	2+4 RP(14, 6)	13	7	2026.97371	2026.97184	187
2+4 PP(21, 3)	20	2	2025.56868	2025.56867	0	2+4 PP(22,15)	21	14	2026.97371	2026.97437	-67
2+4 PP(22, 6)	21	5	2025.62036	2025.62014	22	2+4 RP(15, 3)	14	4	2027.00367	2027.00300	68
2+4 PP(29,24)	28	23	2025.63203	2025.63248	-45	2+4 RQ(53,39)	53	40	2027.00367	2027.00472	-104
2+4 PP(23, 9)	22	8	2025.67734	2025.67776	-42	2+4 RQ(53,33)	53	34	2027.02112	2027.01963	149
2+4 PP(30,27)	29	26	2025.70961	2025.70986	-25	2+4 RQ(56,27)	56	28	2027.03406	2027.03515	-109
2+4 PP(24,12)	23	11	2025.74038	2025.74057	-20	2+4 RP(16, 0)	15	1	2027.04173	2027.04117	55
2+4 PP(31,30)	30	29	2025.78900	2025.78916	-16	2+4 RQ(67,15)	67	16	2027.04958	2027.04822	135
2+4 PP(25,15)	24	14	2025.80745	2025.80776	-31	2+4 PP(23,18)	22	17	2027.04958	2027.05003	-46
2+4 RP(16, 9)	15	10	2025.83245	2025.83024	221	2+4 RQ(58,24)	58	25	2027.07429	2027.07307	122
2+4 RP(15,12)	14	13	2025.83245	2025.83241	4	2+4 PP(17, 3)	16	2	2027.09538	2027.09533	5
2+4 RP(17, 6)	16	7	2025.84340	2025.84373	-34	2+4 RQ(52,39)	52	40	2027.10170	2027.10154	16
2+4 RP(18, 3)	17	4	2025.87101	2025.87007	94	2+4 RQ(52,33)	52	34	2027.11321	2027.11386	-65
2+4 PP(26,18)	25	17	2025.87815	2025.87865	-50	2+4 PP(24,21)	23	20	2027.12823	2027.12883	-60
2+4 RQ(65,30)	65	31	2025.88873	2025.88896	-23	2+4 RQ(53,30)	53	31	2027.14068	2027.13994	74
2+4 RP(19, 0)	18	1	2025.90229	2025.90192	37	2+4 RQ(63,18)	63	19	2027.14694	2027.14739	-46
2+4 PP(27,21)	26	20	2025.95242	2025.95268	-26	2+4 PP(18, 6)	17	5	2027.15289	2027.15319	-31
2+4 PP(20, 3)	19	2	2025.95242	2025.95282	-39	2+4 RQ(51,36)	51	37	2027.16048	2027.16071	-23
2+4 RQ(63,33)	63	34	2025.98258	2025.98252	6	2+4 RQ(66,15)	66	16	2027.16048	2027.16142	-94
2+4 PP(21, 6)	20	5	2026.00553	2026.00587	-35	2+4 RQ(57,24)	57	25	2027.17207	2027.17300	-93
2+4 PP(28,24)	27	23	2026.02893	2026.02938	-44	2+4 RQ(51,39)	51	40	2027.19690	2027.19658	32
2+4 PP(22, 9)	21	8	2026.06512	2026.06509	3	2+4 PP(25,24)	24	23	2027.20928	2027.21029	-101
2+4 PP(29,27)	28	26	2026.10807	2026.10834	-26	2+4 PP(19, 9)	18	8	2027.21703	2027.21721	-19
2+4 RQ(63,30)	63	31	2026.11495	2026.11443	53	2+4 RQ(54,27)	54	28	2027.22767	2027.22815	-47
2+4 PP(23,12)	22	11	2026.12910	2026.12949	-39	2+4 RQ(52,30)	52	31	2027.23314	2027.23310	4
2+4 PP(30,30)	29	29	2026.18899	2026.18921	-21	2+4 RQ(59,21)	59	22	2027.25274	2027.25157	118
2+4 PP(24,15)	23	14	2026.19766	2026.19827	-61	2+4 RQ(50,36)	50	37	2027.25274	2027.25266	8

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	RQ(62,18)	62	19	2027.25274	2027.25445	-171		2+4	RQ(58,15)	58	16	2028.00630	2028.00747	-117					
2+4	RQ(56,24)	56	25	2027.27033	2027.27125	-93		2+4	RQ(51,21)	51	22	2028.01188	2028.01217	-29					
2+4	PP(20,12)	19	11	2027.28624	2027.28641	-17		2+4	RQ(45,27)	45	28	2028.01188	2028.01223	-36					
225	RQ(51,42)	51	43	2027.32078	2027.31992	86		225	RQ(43,42)	43	43	2028.02657	2028.02615	43					
2+4	RQ(51,30)	51	31	2027.32525	2027.32454	71		2+4	RQ(41,33)	41	34	2028.03414	2028.03542	-128					
2+4	RP(12, 9)	11	10	2027.32525	2027.32460	65		2+4	RQ(41,39)	41	40	2028.04942	2028.04866	77					
2+4	RP(13, 6)	12	7	2027.34416	2027.34453	-38		2+4	PP(18,12)	17	11	2028.04942	2028.04946	-3					
2+4	RQ(61,18)	61	19	2027.35941	2027.35985	-44		2+4	RQ(54,18)	54	19	2028.04942	2028.05097	-155					
2+4	PP(21,15)	20	14	2027.35941	2027.35997	-56		2+4	RQ(61,12)	61	13	2028.06896	2028.06815	81					
2+4	RQ(55,24)	55	25	2027.36734	2027.36782	-48		2+4	RQ(42,30)	42	31	2028.06896	2028.06982	-86					
2+4	RP(14, 3)	13	4	2027.37718	2027.37730	-13		2+4	RQ(47,24)	47	25	2028.07983	2028.07939	43					
2+4	RQ(49,39)	49	40	2027.38208	2027.38133	75		2+4	RQ(50,21)	50	22	2028.09928	2028.09967	-39					
2+4	RQ(64,15)	64	16	2027.38208	2027.38287	-79		2+4	RQ(57,15)	57	16	2028.10588	2028.10576	12					
2+4	RQ(49,33)	49	34	2027.38694	2027.38614	80		2+4	PP(19,15)	18	14	2028.12580	2028.12622	-43					
2+4	RP(15, 0)	14	1	2027.41600	2027.41754	-154		2+4	RQ(53,18)	53	19	2028.14323	2028.14302	21					
2+4	PP(22,18)	21	17	2027.43675	2027.43722	-47		2+4	RQ(41,30)	41	31	2028.14323	2028.14396	-73					
2+4	RQ(54,24)	54	25	2027.46327	2027.46269	58		2+4	RQ(46,24)	46	25	2028.16095	2028.16070	25					
2+4	RQ(60,18)	60	19	2027.46327	2027.46359	-32		2+4	RP(13, 0)	12	1	2028.16819	2028.16520	299					
2+4	RQ(48,39)	48	40	2027.47283	2027.47102	180		2+4	RQ(43,27)	43	28	2028.16819	2028.16762	57					
2+4	PP(16, 3)	15	2	2027.47283	2027.47285	-3		2+4	RQ(39,33)	39	34	2028.18037	2028.18019	18					
2+4	RQ(48,33)	48	34	2027.47283	2027.47342	-60		2+4	RQ(49,21)	49	22	2028.18558	2028.18549	9					
2+4	RQ(63,15)	63	16	2027.49079	2027.49111	-32		2+4	PP(20,18)	19	17	2028.20625	2028.20669	-44					
2+4	RQ(51,27)	51	28	2027.50394	2027.50489	-95		2+4	PP(14, 3)	13	2	2028.22324	2028.22293	31					
2+4	PP(23,21)	22	20	2027.51736	2027.51762	-26		2+4	RQ(52,18)	52	19	2028.23310	2028.23339	-28					
2+4	RQ(47,36)	47	37	2027.51736	2027.51796	-60		2+4	RQ(45,24)	45	25	2028.24105	2028.24029	76					
2+4	PP(17, 6)	16	5	2027.53210	2027.53233	-23		2+4	RQ(48,21)	48	22	2028.26945	2028.26961	-16					
2+4	RQ(56,21)	56	22	2027.54901	2027.54939	-38		2+4	PP(15, 6)	14	5	2028.28878W	2028.28564	314					
2+4	RQ(53,24)	53	25	2027.55583	2027.55588	-4		2+4	RQ(39,30)	39	31	2028.28878	2028.28702	176					
2+4	RQ(59,18)	59	19	2027.56522	2027.56566	-44		2+4	PP(21,21)	20	20	2028.28878	2028.29028	-150					
2+4	RQ(48,30)	48	31	2027.58739	2027.58852	-113		2+4	RQ(55,15)	55	16	2028.29697	2028.29734	-37					
2+4	RQ(62,15)	62	16	2027.59929	2027.59770	160		2+4	RQ(41,27)	41	28	2028.31763	2028.31613	150					
2+4	PP(18, 9)	17	8	2027.59929	2027.59796	134		2+4	RQ(37,33)	37	34	2028.31763	2028.31790	-27					
225	RQ(48,42)	48	43	2027.59929	2027.59838	91		2+4	RQ(44,24)	44	25	2028.31763	2028.31819	-56					
2+4	PP(24,24)	23	23	2027.59929	2027.60067	-137		2+4	RQ(51,18)	51	19	2028.32321	2028.32208	114					
2+4	RQ(46,39)	46	40	2027.64474	2027.64505	-31		2+4	RQ(47,21)	47	22	2028.35344	2028.35204	139					
2+4	RQ(55,21)	55	22	2027.64474	2027.64531	-57		2+4	PP(16, 9)	15	8	2028.35344	2028.35449	-106					
2+4	RQ(58,18)	58	19	2027.66828	2027.66606	222		2+4	RQ(58,12)	58	13	2028.37043	2028.37181	-138					
2+4	PP(19,12)	18	11	2027.66828	2027.66875	-47		2+4	RQ(36,33)	36	34	2028.38431	2028.38410	21					
2+4	RQ(49,27)	49	28	2027.68100	2027.68085	15		2+4	RQ(40,27)	40	28	2028.38818	2028.38779	39					
2+4	RQ(45,36)	45	37	2027.68689	2027.68599	90		2+4	RQ(54,15)	54	16	2028.38818	2028.39063	-245					
225	RQ(47,42)	47	43	2027.68689	2027.68757	-68		2+4	RQ(43,24)	43	25	2028.39428	2028.39437	-9					
2+4	RP(11, 9)	10	10	2027.69521	2027.69399	122		2+4	RQ(50,18)	50	19	2028.40932	2028.40909	23					
2+4	RQ(61,15)	61	16	2027.70282	2027.70263	19		2+4	RQ(37,30)	37	31	2028.42195	2028.42310	-115					
2+4	RP(12, 6)	11	7	2027.71633	2027.71555	78		2+4	PP(17,12)	16	11	2028.42800	2028.42851	-51					
2+4	RQ(45,33)	45	34	2027.72566	2027.72479	87		2+4	RQ(46,21)	46	22	2028.43436	2028.43278	158					
2+4	RQ(51,24)	51	25	2027.73779	2027.73717	62		2+4	RQ(35,33)	35	34	2028.44832	2028.44854	-22					
2+4	PP(20,15)	19	14	2027.74336	2027.74392	-56		2+4	RQ(39,27)	39	28	2028.45636	2028.45773	-137					
2+4	RQ(64,12)	64	13	2027.74979	2027.74962	17		2+4	RQ(42,24)	42	25	2028.46885	2028.46885	0					
2+4	RP(13, 3)	12	4	2027.74979	2027.74994	-15		2+4	RQ(57,12)	57	13	2028.46885	2028.46972	-87					
2+4	RQ(46,30)	46	31	2027.75651	2027.75588	63		2+4	RQ(53,15)	53	16	2028.48263	2028.48225	38					
2+4	RQ(57,18)	57	19	2027.76545	2027.76480	66		2+4	RQ(36,30)	36	31	2028.48914	2028.48852	63					
2+4	RQ(48,27)	48	28	2027.76545	2027.76627	-81		2+4	RP(11, 3)	10	4	2028.48914	2028.49021	-107					
225	RQ(46,42)	46	43	2027.77340	2027.77495	-155		2+4	RQ(49,18)	49	19	2028.49443	2028.49441	2					
2+4	RP(14, 0)	13	1	2027.79264	2027.79222	42		2+4	PP(18,15)	17	14	2028.50661	2028.50689	-27					
2+4	RQ(44,33)	44	34	2027.80576	2027.80508	68		2+4	RQ(45,21)	45	22	2028.51269	2028.51183	87					
2+4	RQ(60,15)	60	16	2027.80576	2027.80590	-15		2+4	RQ(38,27)	38	28	2028.52603	2028.52594	9					
2+4	PP(21,18)	20	17	2027.82242	2027.82277	-35		2+4	RP(12, 0)	11	1	2028.53671	2028.53648	23					
2+4	RQ(53,21)	53	22	2027.83220	2027.83211	10		2+4	RQ(41,24)	41	25	2028.54249	2028.54161	88					
2+4	RP(45,30)	45	31	2027.83739	2027.83697	42		2+4	RQ(35,30)	35	31	2028.55190	2028.55219	-29					
2+4	PP(15, 3)	14	2	2027.84905	2027.84872	33		2+4	RQ(56,12)	56	13	2028.56511	2028.56597	-86					
2+4	RQ(47,27)	47	28	2027.84905	2027.84997	-92		2+4	RQ(52,15)	52	16	2028.57201	2028.57220	-19					
2+4	RQ(63,12)	63	13	2027.85652	2027.85744	-92		2+4	RQ(48,18)	48	19	2028.57778	2028.57806	-28					
225	RQ(45,42)	45	43	2027.86107	2027.86051	56		2+4	PP(19,18)	18	17	2028.58885	2028.58895	-10					
2+4	RQ(56,18)	56	19	2027.86107	2027.86186	-79		2+4	RQ(44,21)	44	22	2028.58885	2028.58917	-33					
2+4	RQ(43,33)	43	34	2027.88332	2027.88361	-29		2+4	PP(13, 3)	12	2	2028.59586	2028.59548	38					
2+4	PP(22,21)	21	20	2027.90433	2027.90476	-43		2+4	RQ(40,24)	40	25	2028.61308	2028.61266	42					
2+4	PP(16, 6)	15	5	2027.91023	2027.90981	42		2+4	RQ(34,30)	34	31	2028.61308	2028.61411	-103					
2+4	RQ(49,24)	49	25	2027.91023	2027.91168	-145		2+4	PP(14, 6)	13	5	2028.65934	2028.65981	-47					
2+4	RQ(44,30)	44	31	2027.91751	2027.91632	118		2+4	RQ(47,18)	47	19	2028.65934	2028.66002	-68					
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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 RQ(50,15)	50	16	2028.74784	2028.74709	75	2+4 RQ(26,24)	26	25	2029.42722	2029.42686	36
2+4 RQ(38,24)	38	25	2028.74784	2028.74963	-179	2+4 RQ(64, 0)	64	1	2029.43739	2029.43650	90
2+4 RQ(58, 9)	58	10	2028.75710	2028.75638	72	2+4 RQ(46,12)	46	13	2029.43739	2029.43690	49
2+4 RQ(34,27)	34	28	2028.77971	2028.78147	-175	2+4 RQ(31,21)	31	22	2029.43739	2029.43972	-233
2+4 RQ(31,30)	31	31	2028.78806	2028.78935	-129	2+4 RQ(36,18)	36	19	2029.45066	2029.45007	58
2+4 PP(16,12)	15	11	2028.80558	2028.80591	-33	2+4 RQ(41,15)	41	16	2029.45066	2029.45100	-34
2+4 RQ(41,21)	41	22	2028.81184	2028.81103	81	2+4 RQ(59, 3)	59	4	2029.46431	2029.46603	-173
2+4 RP(9, 6)	8	7	2028.81839	2028.81854	-15	2+4 PP(13, 9)	12	8	2029.47681	2029.47689	-8
2+4 RQ(45,18)	45	19	2028.81839	2028.81889	-49	2+4 RQ(50, 9)	50	10	2029.49162	2029.48978	184
2+4 RQ(49,15)	49	16	2028.83178	2028.83202	-24	2+4 RQ(30,21)	30	22	2029.49162	2029.49319	-157
2+4 RQ(33,27)	33	28	2028.84231	2028.84102	129	2+4 RQ(35,18)	35	19	2029.51316	2029.51172	144
2+4 RQ(53,12)	53	13	2028.84231	2028.84475	-244	2+4 RQ(45,12)	45	13	2029.51316	2029.51481	-165
2+4 RQ(57, 9)	57	10	2028.85357	2028.85379	-22	2+4 RQ(40,15)	40	16	2029.52097	2029.52079	18
2+4 RP(10, 3)	9	4	2028.85979	2028.85784	195	2+4 RQ(29,21)	29	22	2029.54528	2029.54493	34
2+4 RQ(36,24)	36	25	2028.88058	2028.87972	86	2+4 PP(14,12)	13	11	2029.55553	2029.55577	-24
2+4 RQ(40,21)	40	22	2028.88058	2028.88157	-99	2+4 RQ(58, 3)	58	4	2029.56487	2029.56490	-3
2+4 PP(17,15)	16	14	2028.88545	2028.88590	-45	2+4 RQ(34,18)	34	19	2029.57275	2029.57167	108
2+4 RQ(44,18)	44	19	2028.89746	2028.89579	167	2+4 RQ(49, 9)	49	10	2029.57275	2029.57403	-128
2+4 RQ(32,27)	32	28	2028.89746	2028.89883	-137	2+4 RP(8, 3)	7	4	2029.58911	2029.58806	105
2+4 RP(11, 0)	10	1	2028.90713	2028.90607	106	2+4 RQ(39,15)	39	16	2029.58911	2029.58890	21
2+4 RQ(48,15)	48	16	2028.91496	2028.91527	-31	2+4 RQ(44,12)	44	13	2029.58911	2029.59104	-193
2+4 RQ(52,12)	52	13	2028.93480	2028.93435	45	2+4 RQ(28,21)	28	22	2029.59738	2029.59497	241
2+4 RQ(35,24)	35	25	2028.94208	2028.94219	-12	2+4 RQ(33,18)	33	19	2029.63016	2029.62992	24
2+4 RQ(56, 9)	56	10	2028.95010	2028.94957	53	2+4 PP(15,15)	14	14	2029.63872	2029.63899	-27
2+4 RQ(39,21)	39	22	2028.95010	2028.95042	-32	2+4 RP(9, 0)	8	1	2029.63872	2029.64014	-142
2+4 PP(12, 3)	11	2	2028.96901	2028.96636	265	2+4 RQ(27,21)	27	22	2029.64526	2029.64328	197
2+4 PP(18,18)	17	17	2028.96901	2028.96958	-57	2+4 RQ(62, 0)	62	1	2029.64526	2029.64448	78
2+4 RQ(43,18)	43	19	2028.96901	2028.97100	-199	2+4 RQ(38,15)	38	16	2029.65589	2029.65532	57
2+4 RQ(47,15)	47	16	2028.99723	2028.99685	38	2+4 RQ(48, 9)	48	10	2029.65589	2029.65663	-74
2+4 RQ(34,24)	34	25	2029.00349	2029.00294	54	2+4 RQ(43,12)	43	13	2029.66501	2029.66559	-58
2+4 RQ(30,27)	30	28	2029.00349W	2029.00923	-574	2+4 RQ(32,18)	32	19	2029.68729	2029.68647	82
2+4 RQ(38,21)	38	22	2029.01694	2029.01756	-62	2+4 RQ(26,21)	26	22	2029.68729	2029.68988	-259
2+4 RQ(51,12)	51	13	2029.02225	2029.02228	-3	2+4 PP(10, 3)	9	2	2029.70327	2029.70314	13
2+4 PP(13, 6)	12	5	2029.03255	2029.03232	23	2+4 RQ(37,15)	37	16	2029.72043	2029.72005	37
2+4 RQ(55, 9)	55	10	2029.04453	2029.04371	81	2+4 RQ(25,21)	25	22	2029.73831W	2029.73476	355
2+4 RQ(42,18)	42	19	2029.04453	2029.04452	0	2+4 RQ(47, 9)	47	10	2029.73831	2029.73757	74
2+4 RQ(29,27)	29	28	2029.06169	2029.06182	-13	2+4 RQ(42,12)	42	13	2029.73831	2029.73847	-15
2+4 RQ(33,24)	33	25	2029.06169	2029.06197	-28	2+4 RQ(31,18)	31	19	2029.73831	2029.74132	-300
2+4 RQ(46,15)	46	16	2029.07655	2029.07674	-19	2+4 RQ(56, 3)	56	4	2029.75566	2029.75764	-198
2+4 RQ(37,21)	37	22	2029.08353	2029.08300	53	2+4 PP(11, 6)	10	5	2029.77234	2029.77236	-3
2+4 PP(14, 9)	13	8	2029.10439	2029.10442	-3	2+4 RQ(24,21)	24	22	2029.78098W	2029.77792	306
2+4 RQ(50,12)	50	13	2029.10864	2029.10855	9	2+4 RQ(36,15)	36	16	2029.78098	2029.78309	-212
2+4 RQ(41,18)	41	19	2029.11652	2029.11635	17	2+4 RQ(30,18)	30	19	2029.79522	2029.79446	76
2+4 RQ(54, 9)	54	10	2029.13609	2029.13622	-13	2+4 RQ(41,12)	41	13	2029.81007	2029.80966	40
2+4 RQ(36,21)	36	22	2029.14595	2029.14672	-78	2+4 RQ(46, 9)	46	10	2029.81697	2029.81685	12
2+4 RQ(45,15)	45	16	2029.15511	2029.15496	15	2+4 RQ(23,21)	23	22	2029.81697	2029.81936	-239
2+4 RQ(31,24)	31	25	2029.17540	2029.17486	54	2+4 RQ(35,15)	35	16	2029.84633	2029.84444	189
2+4 PP(15,12)	14	11	2029.18157	2029.18167	-9	2+4 RQ(29,18)	29	19	2029.84633	2029.84589	44
2+4 RP(8, 6)	7	7	2029.18157	2029.18284	-127	2+4 RQ(60, 0)	60	1	2029.84633	2029.84603	30
2+4 RQ(40,18)	40	19	2029.18718	2029.18649	70	2+4 PP(12, 9)	11	8	2029.84633	2029.84771	-138
2+4 RQ(49,12)	49	13	2029.19315	2029.19314	0	2+4 RQ(22,21)	22	22	2029.85892	2029.85908	-16
2+4 RQ(35,21)	35	22	2029.20906	2029.20875	31	2+4 RQ(40,12)	40	13	2029.87924	2029.87918	6
2+4 RP(9, 3)	8	4	2029.22543	2029.22379	164	2+4 RQ(45, 9)	45	10	2029.89526	2029.89446	79
2+4 RQ(53, 9)	53	10	2029.22543	2029.22708	-165	2+4 RQ(28,18)	28	19	2029.89526	2029.89562	-37
2+4 RQ(30,24)	30	25	2029.23031	2029.22871	159	2+4 RQ(34,15)	34	16	2029.90418	2029.90410	8
2+4 RQ(44,15)	44	16	2029.23031	2029.23149	-119	2+4 PP(13,12)	12	11	2029.92782	2029.92821	-39
2+4 RQ(39,18)	39	19	2029.25533	2029.25493	41	2+4 RQ(27,18)	27	19	2029.94529	2029.94365	164
2+4 PP(16,15)	15	14	2029.26277	2029.26327	-50	2+4 RQ(54, 3)	54	4	2029.94529	2029.94373	156
2+4 RQ(61, 3)	61	4	2029.26277	2029.26329	-52	2+4 RQ(59, 0)	59	1	2029.94529	2029.94439	89
2+4 RQ(34,21)	34	22	2029.26988	2029.26906	82	2+4 RQ(39,12)	39	13	2029.94529	2029.94701	-173
2+4 RP(10, 0)	9	1	2029.27572	2029.27396	177	2+4 RQ(33,15)	33	16	2029.96242	2029.96206	35
2+4 RQ(48,12)	48	13	2029.27572	2029.27607	-35	2+4 RQ(49, 6)	49	7	2029.96950	2029.96758	191
2+4 RQ(29,24)	29	25	2029.28161	2029.28084	77	2+4 RQ(44, 9)	44	10	2029.96950	2029.97041	-91
2+4 RQ(43,15)	43	16	2029.30615	2029.30634	-20	2+4 RQ(26,18)	26	19	2029.99068	2029.98996	72
2+4 RQ(52, 9)	52	10	2029.31676	2029.31630	46	2+4 RP(8, 0)	7	1	2030.00480	2030.00463	17
2+4 RQ(38,18)	38	19	2029.32196	2029.32167	28	2+4 RQ(38,12)	38	13	2030.01314	2030.01317	-2
2+4 RQ(33,21)	33	22	2029.32862	2029.32766	96	2+4 RQ(32,15)	32	16	2030.01899	2030.01833	66
2+4 RQ(65, 0)	65	1	2029.32862	2029.33010	-148	2+4 RQ(53, 3)	53	4	2030.03472	2030.03429	44
2+4 RQ(28,24)	28	25	2029.32862	2029.33125	-263	2+4 RQ(25,18)	25	19	2030.03472	2030.03457	15
2+4 PP(11, 3)	10	2	2029.33565	2029.33558	6	2+4 RQ(43, 9)	43	10	2030.04373	2030.04469	-96
2+4 RQ(47,12)	47	13	2029.35666	2029.35732	-67	2+4 RQ(48, 6)	48	7	2030.05084	2030.05031	53
2+4 RQ(60, 3)	60	4	2029.36525	2029.36550	-25	2+4 PP(9, 3)	8	2	2030.06820	2030.06903	-83
2+4 RQ(42,15)	42	16	2029.37951	2029.37951	0	2+4 RQ(31,15)	31	16	2030.07271	2030.07290	-19
2+4 RQ(27,24)	27	25	2029.37951	2029.37992	-41	2+4 RQ(24,18)	24	19	2030.07761	2030.07746	15
2+4 RQ(32,21)	32	22	2029.38585	2029.38455	130	2+4 RQ(37,12)	37	13	2030.07761	2030.07763	-2
2+4 RQ(37,18)	37	19	2029.38585	2029.38672	-88	2+4 RQ(42, 9)	42	10	2030.11797	2030.11730	68
2+4 PP(12, 6)	11	5	2029.40284	2029.40318	-33	2+4 RQ(23,18)	23	19	2030.11797	2030.11865	-68
2+4 RQ(51, 9)	51	10	2029.40284	2029.40386	-102	2+4 RQ(30,15)	30	16	2030.12696	2030.12578	118

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PQ(61, 3)	61 2	2030.12696	2030.12594	102	2+4 PQ(63, 9)	63 8	2030.80444	2030.80553	-110
2+4 PP(10, 6)	9 5	2030.13996	2030.13989	6	2+4 RQ(22,12)	22 13	2030.84209	2030.84203	6
2+4 RQ(36,12)	36 13	2030.13996	2030.14042	-46	2+4 RQ(43, 3)	43 4	2030.84866	2030.84854	12
2+4 RQ(22,18)	22 19	2030.15848	2030.15813	36	2+4 RQ(37, 6)	37 7	2030.84866	2030.84883	-17
2+4 RQ(29,15)	29 16	2030.17717	2030.17696	21	2+4 RQ(30, 9)	30 10	2030.85832	2030.85789	43
2+4 RQ(41, 9)	41 10	2030.18829	2030.18862	-33	2+4 PQ(58, 6)	58 5	2030.86469	2030.86466	3
2+4 RQ(35,12)	35 13	2030.20182	2030.20152	31	2+4 PP(8, 6)	7 5	2030.87012	2030.86995	17
2+4 RQ(51, 3)	51 4	2030.21012	2030.21042	-30	2+4 RQ(21,12)	21 13	2030.87979	2030.87945	34
2+4 RQ(46, 6)	46 7	2030.21012	2030.21070	-58	2+4 PQ(53, 3)	53 2	2030.89119	2030.89171	-51
2+4 PP(11, 9)	10 8	2030.21688	2030.21687	0	2+4 RQ(29, 9)	29 10	2030.90999	2030.90868	132
2+4 RQ(28,15)	28 16	2030.22782	2030.22644	139	2+4 PQ(62, 9)	62 8	2030.90999	2030.91014	-14
2+4 PQ(60, 3)	60 2	2030.22782	2030.22737	45	2+4 RQ(36, 6)	36 7	2030.90999	2030.91130	-130
2+4 RQ(56, 0)	56 1	2030.22782	2030.22981	-199	2+4 RQ(20,12)	20 13	2030.92007W	2030.91517	490
2+4 RQ(20,18)	20 19	2030.22782W	2030.23195	-412	2+4 RQ(48, 0)	48 1	2030.92007	2030.91975	32
2+4 RQ(40, 9)	40 10	2030.25918	2030.25750	168	2+4 RQ(42, 3)	42 4	2030.92007	2030.92082	-75
2+4 RQ(34,12)	34 13	2030.25918	2030.26093	-175	2+4 RQ(19,12)	19 13	2030.94998	2030.94919	79
2+4 RQ(19,18)	19 19	2030.26821	2030.26629	193	2+4 PP(9, 9)	8 8	2030.94998	2030.95021	-23
2+4 RQ(27,15)	27 16	2030.27464	2030.27422	43	2+4 RQ(28, 9)	28 10	2030.95854	2030.95778	76
2+4 RQ(45, 6)	45 7	2030.28803	2030.28835	-32	2+4 RQ(35, 6)	35 7	2030.97222	2030.97208	14
2+4 RQ(50, 3)	50 4	2030.29824	2030.29600	224	2+4 PQ(52, 3)	52 2	2030.98103	2030.98007	96
2+4 PP(12,12)	11 11	2030.29824	2030.29900	-75	2+4 RQ(18,12)	18 13	2030.98103	2030.98151	-48
2+4 RQ(33,12)	33 13	2030.31952	2030.31865	87	2+4 RQ(41, 3)	41 4	2030.99124	2030.99143	-19
2+4 RQ(26,15)	26 16	2030.31952	2030.32030	-78	2+4 RQ(47, 0)	47 1	2030.99957	2030.99869	88
2+4 RQ(55, 0)	55 1	2030.31952	2030.32172	-220	2+4 RQ(27, 9)	27 10	2031.00536	2031.00520	16
2+4 RQ(39, 9)	39 10	2030.32562	2030.32509	53	2+4 RQ(17,12)	17 13	2031.01267	2031.01214	53
2+4 PQ(59, 3)	59 2	2030.32562	2030.32717	-156	2+4 PQ(61, 9)	61 8	2031.01267	2031.01311	-43
2+4 RQ(44, 6)	44 7	2030.36442	2030.36432	10	2+4 RQ(34, 6)	34 7	2031.03100	2031.03118	-18
2+4 RQ(25,15)	25 16	2030.36442	2030.36468	-26	2+4 RQ(16,12)	16 13	2031.04107	2031.04106	1
2+4 RQ(32,12)	32 13	2030.37474	2030.37469	5	2+4 RQ(26, 9)	26 10	2031.05119	2031.05093	26
2+4 RQ(49, 3)	49 4	2030.38063	2030.37992	71	2+4 RQ(40, 3)	40 4	2031.05990	2031.06037	-47
2+4 RQ(38, 9)	38 10	2030.39124	2030.39101	23	2+4 PQ(51, 3)	51 2	2031.06798	2031.06678	120
2+4 RQ(24,15)	24 16	2030.40848	2030.40736	111	2+4 RQ(15,12)	15 13	2031.06798	2031.06829	-31
2+4 RQ(31,12)	31 13	2030.42924	2030.42904	20	2+4 RQ(46, 0)	46 1	2031.07556	2031.07600	-44
2+4 RQ(43, 6)	43 7	2030.43837	2030.43860	-22	2+4 RP(5, 0)	4 1	2031.08873	2031.08786	88
2+4 RQ(23,15)	23 16	2030.44868	2030.44834	34	2+4 RQ(33, 6)	33 7	2031.08873	2031.08859	14
2+4 RQ(37, 9)	37 10	2030.45525	2030.45525	1	2+4 RQ(14,12)	14 13	2031.09519	2031.09382	137
2+4 RQ(48, 3)	48 4	2030.46232	2030.46218	14	2+4 RQ(25, 9)	25 10	2031.09519	2031.09497	22
2+4 PQ(62, 6)	62 5	2030.46232	2030.46225	8	2+4 PQ(60, 9)	60 8	2031.11517	2031.11444	73
2+4 RQ(30,12)	30 13	2030.48214	2030.48170	45	2+4 RQ(13,12)	13 13	2031.11517	2031.11764	-247
2+4 RQ(22,15)	22 16	2030.48830	2030.48762	69	2+4 RQ(39, 3)	39 4	2031.12791	2031.12764	26
2+4 RQ(53, 0)	53 1	2030.50036	2030.50069	-33	2+4 RQ(24, 9)	24 10	2031.13790	2031.13732	57
2+4 PP(9, 6)	8 5	2030.50572	2030.50575	-4	2+4 RQ(32, 6)	32 7	2031.14455	2031.14432	23
2+4 RQ(42, 6)	42 7	2030.51104	2030.51118	-14	2+4 RQ(45, 0)	45 1	2031.15116	2031.15169	-53
2+4 RQ(36, 9)	36 10	2030.51812	2030.51781	31	2+4 PQ(50, 3)	50 2	2031.15116	2031.15186	-70
2+4 RQ(21,15)	21 16	2030.52554	2030.52519	35	2+4 PP(6, 3)	5 2	2031.15677	2031.15667	9
2+4 RQ(29,12)	29 13	2030.53302	2030.53266	35	2+4 RQ(23, 9)	23 10	2031.17767	2031.17799	-32
2+4 RQ(47, 3)	47 4	2030.54278	2030.54278	0	2+4 RQ(38, 3)	38 4	2031.19334	2031.19325	9
2+4 RQ(20,15)	20 16	2030.56188	2030.56106	82	2+4 RQ(31, 6)	31 7	2031.19872	2031.19836	35
2+4 PQ(61, 6)	61 5	2030.56709	2030.56530	179	2+4 RQ(22, 9)	22 10	2031.21707	2031.21696	10
2+4 RQ(35, 9)	35 10	2030.58185W	2030.57869	316	2+4 RQ(44, 0)	44 1	2031.22472	2031.22574	-103
2+4 RQ(28,12)	28 13	2030.58185	2030.58194	-8	2+4 PP(7, 6)	6 5	2031.23297	2031.23248	50
2+4 RQ(41, 6)	41 7	2030.58185	2030.58209	-23	2+4 PQ(49, 3)	49 2	2031.23297	2031.23529	-231
2+4 PP(10, 9)	9 8	2030.58185	2030.58437	-251	2+4 PQ(54, 6)	54 5	2031.24165	2031.24088	76
2+4 RQ(19,15)	19 16	2030.59613	2030.59523	90	2+4 RQ(30, 6)	30 7	2031.25148	2031.25072	76
2+4 RQ(46, 3)	46 4	2030.62103	2030.62171	-68	2+4 RQ(21, 9)	21 10	2031.25592	2031.25425	168
2+4 RQ(18,15)	18 16	2030.62946	2030.62769	177	2+4 RQ(37, 3)	37 4	2031.25592	2031.25718	-126
2+4 RQ(27,12)	27 13	2030.62946	2030.62952	-6	2+4 RQ(20, 9)	20 10	2031.28961	2031.28984	-23
2+4 RQ(34, 9)	34 10	2030.63824	2030.63789	35	2+4 RQ(43, 0)	43 1	2031.30037	2031.29817	220
2+4 RQ(40, 6)	40 7	2030.65160	2030.65130	30	2+4 RQ(29, 6)	29 7	2031.30037	2031.30139	-102
2+4 RQ(17,15)	17 16	2030.65915	2030.65844	71	2+4 PQ(58, 9)	58 8	2031.31202	2031.31221	-19
2+4 RQ(51, 0)	51 1	2030.67506	2030.67318	188	2+4 PQ(48, 3)	48 2	2031.31887	2031.31707	180
2+4 RQ(26,12)	26 13	2030.67506	2030.67541	-35	2+4 RQ(36, 3)	36 4	2031.31887	2031.31944	-57
2+4 RQ(33, 9)	33 10	2030.69684	2030.69542	142	2+4 RQ(19, 9)	19 10	2031.32446	2031.32374	72
2+4 RQ(45, 3)	45 4	2030.69684	2030.69899	-215	2+4 PQ(53, 6)	53 5	2031.33075	2031.33084	-9
2+4 PQ(64, 9)	64 8	2030.69684	2030.69930	-246	2+4 RQ(28, 6)	28 7	2031.35075	2031.35038	37
2+4 PQ(55, 3)	55 2	2030.71128	2030.71007	121	2+4 RQ(18, 9)	18 10	2031.35657	2031.35595	62
2+4 RQ(39, 6)	39 7	2030.71947	2030.71883	64	2+4 RQ(42, 0)	42 1	2031.36839	2031.36896	-57
2+4 RQ(25,12)	25 13	2030.71947	2030.71961	-14	2+4 RQ(35, 3)	35 4	2031.38008	2031.38003	5
2+4 RP(6, 0)	5 1	2030.73034	2030.72849	185	2+4 RQ(17, 9)	17 10	2031.38724	2031.38647	78
2+4 RQ(32, 9)	32 10	2030.75159	2030.75126	33	2+4 PQ(66,15)	66 14	2031.39769	2031.39718	51
2+4 RQ(50, 0)	50 1	2030.75727	2030.75699	27	2+4 PQ(47, 3)	47 2	2031.39769	2031.39721	48
2+4 RQ(24,12)	24 13	2030.76295	2030.76211	84	2+4 RQ(27, 6)	27 7	2031.39769	2031.39768	1
2+4 PQ(59, 6)	59 5	2030.76844	2030.76651	193	2+4 PQ(57, 9)	57 8	2031.40958	2031.40864	94
2+4 RQ(44, 3)	44 4	2030.77428	2030.77459	-32	2+4 RQ(16, 9)	16 10	2031.41680	2031.41529	151
2+4 RQ(38, 6)	38 7	2030.78478	2030.78467	11	2+4 RQ(41, 0)	41 1	2031.43846	2031.43813	34
2+4 PP(7, 3)	6 2	2030.79608	2030.79580	28	2+4 RQ(34, 3)	34 4	2031.43846	2031.43894	-48
2+4 RQ(32,12)	23 13	2030.80444	2030.80292	152	2+4 RQ(15, 9)	15 10	2031.44349	2031.44242	107
2+4 RQ(31, 9)	31 10	2030.80444	2030.80541	-98	2+4 RQ(26, 6)	26 7	2031.44349	2031.44329	20

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 PQ(61,12)	61	11	2031.46841	2031.46747	94	2+4 PQ(50, 9)	50	8	2032.03923	2032.03772	151
2+4 RQ(14, 9)	14	10	2031.46841	2031.46786	55	2+4 RQ(31, 0)	31	1	2032.03923	2032.03978	-55
2+4 PQ(46, 3)	46	2	2031.47552	2031.47570	-18	2+4 PQ(38, 3)	38	2	2032.04438	2032.04411	26
2+4 RQ(25, 6)	25	7	2031.48763	2031.48722	41	2+4 PQ(55,12)	55	11	2032.05201	2032.05041	159
2+4 RQ(13, 9)	13	10	2031.49591W	2031.49160	431	2+4 RQ(21, 3)	21	4	2032.05201	2032.05216	-15
2+4 RQ(33, 3)	33	4	2031.49591	2031.49618	-27	2+4 PQ(44, 6)	44	5	2032.06657	2032.06636	21
2+4 PQ(56, 9)	56	8	2031.50539	2031.50343	196	2+4 PQ(64,18)	64	17	2032.08075	2032.07933	142
2+4 RQ(40, 0)	40	1	2031.50539	2031.50566	-27	2+4 RQ(20, 3)	20	4	2032.08902	2032.08756	146
2+4 PQ(51, 6)	51	5	2031.50539	2031.50582	-43	2+4 RQ(30, 0)	30	1	2032.08902	2032.09093	-191
2+4 PQ(65,15)	65	14	2031.50539	2031.50649	-110	2+4 PQ(37, 3)	37	2	2032.10746	2032.10771	-25
2+4 RQ(12, 9)	12	10	2031.51490	2031.51365	125	2+4 PQ(49, 9)	49	8	2032.12129	2032.12101	28
2+4 PP(5, 3)	4	2	2031.51490	2031.51588	-98	2+4 RQ(19, 3)	19	4	2032.12129	2032.12129	0
2+4 RQ(24, 6)	24	7	2031.52881	2031.52946	-65	2+4 PQ(59,15)	59	14	2032.12854	2032.12813	40
2+4 RQ(11, 9)	11	10	2031.53609	2031.53400	208	2+4 PQ(43, 6)	43	5	2032.13972	2032.13983	-12
2+4 RQ(32, 3)	32	4	2031.55193	2031.55174	19	2+4 RQ(29, 0)	29	1	2032.13972	2032.14044	-72
2+4 PQ(45, 3)	45	2	2031.55193	2031.55254	-60	2+4 PQ(54,12)	54	11	2032.13972	2032.14184	-212
2+4 RQ(10, 9)	10	10	2031.55193	2031.55266	-73	2+4 RQ(18, 3)	18	4	2032.15382	2032.15332	49
2+4 PQ(60,12)	60	11	2031.57082	2031.56871	211	2+4 PQ(36, 3)	36	2	2032.16936	2032.16965	-28
2+4 RQ(23, 6)	23	7	2031.57082	2031.57002	81	2+4 RQ(17, 3)	17	4	2032.18639	2032.18368	271
2+4 RQ(39, 0)	39	1	2031.57082	2031.57155	-73	2+4 PQ(63,18)	63	17	2032.18639	2032.18530	109
2+4 PQ(50, 6)	50	5	2031.59239	2031.59084	155	2+4 RQ(28, 0)	28	1	2032.18639	2032.18830	-191
2+4 PP(6, 6)	5	5	2031.59239	2031.59333	-94	2+4 PQ(48, 9)	48	8	2032.20196	2032.20265	-70
2+4 PQ(55, 9)	55	8	2031.59857	2031.59659	198	2+4 PQ(42, 6)	42	5	2032.21208	2032.21165	43
2+4 RQ(31, 3)	31	4	2031.60732	2031.60563	169	2+4 RQ(16, 3)	16	4	2032.21208	2032.21235	-27
2+4 RQ(22, 6)	22	7	2031.60732	2031.60889	-156	2+4 PQ(35, 3)	35	2	2032.22979	2032.22992	-14
2+4 PQ(64,15)	64	14	2031.61567	2031.61417	149	2+4 PQ(53,12)	53	11	2032.22979	2032.23162	-184
2+4 PQ(44, 3)	44	2	2031.62744	2031.62772	-28	2+4 RQ(27, 0)	27	1	2032.23480	2032.23452	28
2+4 RQ(38, 0)	38	1	2031.63561	2031.63581	-21	2+4 RQ(15, 3)	15	4	2032.24029	2032.23933	95
2+4 RQ(21, 6)	21	7	2031.64648	2031.64607	41	2+4 RQ(14, 3)	14	4	2032.26503	2032.26463	40
2+4 RQ(30, 3)	30	4	2031.65807	2031.65784	22	2+4 RQ(26, 0)	26	1	2032.28020	2032.27909	110
2+4 PQ(59,12)	59	11	2031.66883	2031.66833	50	2+4 PQ(41, 6)	41	5	2032.28020	2032.28181	-162
2+4 PQ(49, 6)	49	5	2031.67396	2031.67422	-26	2+4 PQ(47, 9)	47	8	2032.28020	2032.28265	-246
2+4 RQ(20, 6)	20	7	2031.68197	2031.68156	41	2+4 RQ(13, 3)	13	4	2032.28864	2032.28825	40
2+4 PQ(54, 9)	54	8	2031.68851	2031.68810	41	2+4 PQ(34, 3)	34	2	2032.28864	2032.28854	11
2+4 RQ(37, 0)	37	1	2031.69889	2031.69844	45	2+4 PQ(62,18)	62	17	2032.28864	2032.28964	-100
2+4 PQ(43, 3)	43	2	2031.69889	2031.70126	-237	2+4 RQ(12, 3)	12	4	2032.30993	2032.31017	-24
2+4 RQ(29, 3)	29	4	2031.70852	2031.70837	15	2+4 PQ(52,12)	52	11	2032.32137	2032.31977	160
2+4 RQ(19, 6)	19	7	2031.71583	2031.71537	46	2+4 RQ(25, 0)	25	1	2032.32137	2032.32202	-65
2+4 RQ(18, 6)	18	7	2031.74795	2031.74748	47	2+4 PQ(57,15)	57	14	2032.32137	2032.32229	-92
2+4 PQ(48, 6)	48	5	2031.75753	2031.75595	158	2+4 RQ(11, 3)	11	4	2032.33103	2032.33042	61
2+4 RQ(28, 3)	28	4	2031.75753	2031.75723	30	2+4 PQ(66,21)	66	20	2032.33103	2032.33217	-114
2+4 RQ(36, 0)	36	1	2031.75753	2031.75943	-189	2+4 PQ(33, 3)	33	2	2032.34579	2032.34549	30
2+4 PQ(58,12)	58	11	2031.76620	2031.76630	-11	2+4 RQ(10, 3)	10	4	2032.35045	2032.34897	148
2+4 PQ(42, 3)	42	2	2031.77325	2031.77314	10	2+4 PQ(40, 6)	40	5	2032.35045	2032.35032	13
2+4 RQ(17, 6)	17	7	2031.77840	2031.77791	49	2+4 PQ(46, 9)	46	8	2032.36305	2032.36100	206
2+4 PQ(53, 9)	53	8	2031.77840	2031.77797	43	2+4 RQ(24, 0)	24	1	2032.36305	2032.36330	-25
2+4 RQ(27, 3)	27	4	2031.80537	2031.80440	97	2+4 RQ(9, 3)	9	4	2032.36305	2032.36584	-279
2+4 RQ(16, 6)	16	7	2031.80537	2031.80665	-128	2+4 RQ(8, 3)	8	4	2032.38151	2032.38103	48
2+4 RQ(35, 0)	35	1	2031.81868	2031.81878	-10	2+4 PQ(61,18)	61	17	2032.39394	2032.39236	158
2+4 PQ(62,15)	62	14	2031.82551	2031.82465	86	2+4 RQ(7, 3)	7	4	2032.39394	2032.39452	-58
2+4 RQ(15, 6)	15	7	2031.83464	2031.83370	94	2+4 PQ(32, 3)	32	2	2032.40180	2032.40077	103
2+4 PQ(47, 6)	47	5	2031.83464	2031.83603	-139	2+4 RQ(23, 0)	23	1	2032.40180	2032.40294	-114
2+4 PQ(41, 3)	41	2	2031.84351	2031.84337	14	2+4 PQ(51,12)	51	11	2032.40672	2032.40626	46
2+4 RQ(26, 3)	26	4	2031.84990	2031.84990	0	2+4 RQ(6, 3)	6	4	2032.40672	2032.40633	39
2+4 RQ(14, 6)	14	7	2031.85891	2031.85907	-16	2+4 RQ(5, 3)	5	4	2032.41720	2032.41646	74
2+4 PQ(52, 9)	52	8	2031.86554	2031.86620	-66	2+4 PQ(56,15)	56	14	2032.41720	2032.41691	29
2+4 RQ(34, 0)	34	1	2031.87571	2031.87649	-77	2+4 PQ(39, 6)	39	5	2032.41720	2032.41717	3
2+4 RQ(13, 6)	13	7	2031.88351	2031.88274	77	2+4 RQ(4, 3)	4	4	2032.42574	2032.42489	84
2+4 RQ(25, 3)	25	4	2031.89385	2031.89371	13	2+4 PQ(45, 9)	45	8	2032.43994	2032.43769	225
2+4 RQ(12, 6)	12	7	2031.90506	2031.90472	34	2+4 RQ(22, 0)	22	1	2032.43994	2032.44093	-99
2+4 PQ(40, 3)	40	2	2031.91309	2031.91194	115	2+4 PQ(65,21)	65	20	2032.43994	2032.44132	-138
2+4 PQ(46, 6)	46	5	2031.91309	2031.91446	-137	2+4 PQ(31, 3)	31	2	2032.45305	2032.45439	-134
2+4 RQ(11, 6)	11	7	2031.92583	2031.92502	81	2+4 RQ(21, 0)	21	1	2032.47802	2032.47727	76
2+4 PQ(61,15)	61	14	2031.92583	2031.92744	-162	2+4 PQ(38, 6)	38	5	2032.48261	2032.48236	26
2+4 RQ(33, 0)	33	1	2031.93404	2031.93256	148	2+4 PQ(50,12)	50	11	2032.49077	2032.49112	-35
2+4 RQ(24, 3)	24	4	2031.93404	2031.93585	-181	2+4 PQ(30, 3)	30	2	2032.50694	2032.50635	60
2+4 RQ(10, 6)	10	7	2031.94405	2031.94362	43	2+4 PQ(55,15)	55	14	2032.51217	2032.50989	228
2+4 PQ(51, 9)	51	8	2031.95247	2031.95278	-31	2+4 RQ(20, 0)	20	1	2032.51217	2032.51196	21
2+4 PQ(56,12)	56	11	2031.95932	2031.95735	197	2+4 PQ(44, 9)	44	8	2032.51217	2032.51274	-57
2+4 RQ(9, 6)	9	7	2031.95932	2031.96053	-121	2+4 RQ(19, 0)	19	1	2032.54539	2032.54500	39
2+4 RQ(8, 6)	8	7	2031.97719	2031.97575	143	2+4 PQ(37, 6)	37	5	2032.54539	2032.54589	-50
2+4 RQ(23, 3)	23	4	2031.97719	2031.97630	89	2+4 PQ(29, 3)	29	2	2032.55658	2032.55663	-6
2+4 PQ(39, 3)	39	2	2031.97719	2031.97886	-167	2+4 PQ(49,12)	49	11	2032.57573	2032.57433	140
2+4 RQ(32, 0)	32	1	2031.98722	2031.98699	22	2+4 RQ(18, 0)	18	1	2032.57573	2032.57640	-67
2+4 RQ(7, 6)	7	7	2031.99145	2031.98928	217	2+4 PQ(43, 9)	43	8	2032.58557	2032.58613	-55
2+4 PQ(45, 6)	45	5	2031.99145	2031.99124	21	2+4 PQ(59,18)	59	17	2032.59316	2032.59289	27
2+4 RQ(22, 3)	22	4	2032.01538	2032.01507	31	2+4 RQ(28, 3)	28	2	2032.60601	2032.60525	76
2+4 PQ(60,15)	60	14	2032.02944	2032.02861	84	2+4 RQ(17, 0)	17	1	2032.60601	2032.60614	-13

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PQ(36, 6)	36 5	2032.60601	2032.60776	-175	2+4 PQ(47,15)	47 14	2033.19465	2033.19466	-1
2+4 RQ(16, 0)	16 1	2032.63445	2032.63424	22	2+4 RR(0, 0)	1 1	2033.21102	2033.20818	284
2+4 PQ(27, 3)	27 2	2032.65220	2032.65220	0	2+4 PQ(9, 3)	9 2	2033.21102	2033.21115	-13
2+4 PQ(48,12)	48 11	2032.65807	2032.65589	218	2+4 PQ(24, 6)	24 5	2033.22016	2033.22038	-22
2+4 PQ(42, 9)	42 8	2032.65807	2032.65787	20	2+4 PQ(8, 3)	8 2	2033.22784	2033.22627	157
2+4 RQ(15, 0)	15 1	2032.65807	2032.66068	-261	2+4 PQ(33, 9)	33 8	2033.22784	2033.22894	-110
2+4 PQ(35, 6)	35 5	2032.66788	2032.66797	-8	2+4 PQ(7, 3)	7 2	2033.24029	2033.23971	58
2+4 RQ(14, 0)	14 1	2032.68559	2032.68547	12	2+4 PQ(52,18)	52 17	2033.24417	2033.24324	94
2+4 PQ(58,18)	58 17	2032.69142	2032.69071	72	2+4 PQ(40,12)	40 11	2033.24959	2033.24900	59
2+4 PQ(53,15)	53 14	2032.69142	2032.69094	48	2+4 PQ(6, 3)	6 2	2033.24959	2033.25147	-188
2+4 PQ(26, 3)	26 2	2032.69716	2032.69748	-33	2+4 PQ(23, 6)	23 5	2033.26067	2033.26059	8
2+4 RQ(13, 0)	13 1	2032.70861	2032.70862	-1	2+4 PQ(5, 3)	5 2	2033.26067	2033.26156	-89
2+4 PQ(34, 6)	34 5	2032.72805	2032.72651	154	2+4 PQ(46,15)	46 14	2033.27271	2033.27286	-15
2+4 PQ(41, 9)	41 8	2032.72805	2032.72795	10	2+4 PQ(66,27)	66 26	2033.28376	2033.28279	98
2+4 RQ(12, 0)	12 1	2032.72805	2032.73011	-206	2+4 PQ(32, 9)	32 8	2033.28376	2033.28409	-33
2+4 PQ(47,12)	47 11	2032.73605	2032.73581	24	2+4 PQ(22, 6)	22 5	2033.29900	2033.29913	-13
2+4 PQ(25, 3)	25 2	2032.74123	2032.74109	13	2+4 PQ(39,12)	39 11	2033.31536	2033.31570	-34
2+4 RQ(11, 0)	11 1	2032.74998	2032.74994	3	2+4 PQ(51,18)	51 17	2033.32953	2033.32959	-6
2+4 PQ(62,21)	62 20	2032.75993	2032.75901	92	2+4 PQ(61,24)	61 23	2033.33648	2033.33488	160
2+4 RQ(10, 0)	10 1	2032.76842	2032.76813	29	2+4 PQ(21, 6)	21 5	2033.33648	2033.33600	48
2+4 PQ(24, 3)	24 2	2032.78362	2032.78303	59	2+4 PQ(31, 9)	31 8	2033.33648	2033.33758	-110
2+4 PQ(33, 6)	33 5	2032.78362	2032.78340	22	2+4 PQ(45,15)	45 14	2033.34956	2033.34940	16
2+4 RQ(9, 0)	9 1	2032.78362	2032.78466	-105	2+4 PQ(56,21)	56 20	2033.34956	2033.35038	-82
2+4 PQ(40, 9)	40 8	2032.79555	2032.79638	-83	2+4 PQ(20, 6)	20 5	2033.37125	2033.37120	5
2+4 RQ(8, 0)	8 1	2032.80098	2032.79955	144	2+4 PQ(38,12)	38 11	2033.38031	2033.38074	-44
2+4 RQ(7, 0)	7 1	2032.81343	2032.81277	66	2+4 PQ(30, 9)	30 8	2033.38900	2033.38941	-40
2+4 PQ(46,12)	46 11	2032.81343	2032.81407	-64	2+4 PQ(19, 6)	19 5	2033.40461	2033.40472	-11
2+4 PQ(23, 3)	23 2	2032.82339	2032.82330	9	2+4 PQ(50,18)	50 17	2033.41530	2033.41430	100
2+4 RQ(6, 0)	6 1	2032.82339	2032.82435	-96	2+4 PQ(44,15)	44 14	2033.42407	2033.42430	-23
2+4 RQ(5, 0)	5 1	2032.83736W	2032.83427	309	2+4 PQ(60,24)	60 23	2033.43701	2033.43583	119
2+4 PQ(32, 6)	32 5	2032.83736	2032.83861	-126	2+4 PQ(18, 6)	18 5	2033.43701	2033.43657	44
2+4 RQ(3, 0)	3 1	2032.84917	2032.84915	1	2+4 PQ(29, 9)	29 8	2033.43701	2033.43957	-255
2+4 RQ(2, 0)	2 1	2032.85553	2032.85411	141	2+4 PQ(55,21)	55 20	2033.44417	2033.44323	94
2+4 PQ(61,21)	61 20	2032.86252	2032.86166	87	2+4 PQ(37,12)	37 11	2033.44417	2033.44413	4
2+4 PQ(22, 3)	22 2	2032.86252	2032.86189	63	2+4 PQ(17, 6)	17 5	2033.46659	2033.46675	-16
2+4 PQ(39, 9)	39 8	2032.86252	2032.86315	-63	2+4 PQ(28, 9)	28 8	2033.48770	2033.48806	-36
2+4 PQ(51,15)	51 14	2032.86252	2032.86542	-290	2+4 PQ(16, 6)	16 5	2033.49602	2033.49525	77
2+4 PQ(56,18)	56 17	2032.88198	2032.88143	55	2+4 PQ(49,18)	49 17	2033.49602	2033.49736	-134
2+4 PQ(45,12)	45 11	2032.89109	2032.89069	40	2+4 PQ(43,15)	43 14	2033.49602	2033.49754	-152
2+4 PQ(31, 6)	31 5	2032.89109	2032.89217	-108	2+4 PQ(36,12)	36 11	2033.50583	2033.50586	-3
2+4 PQ(21, 3)	21 2	2032.89894	2032.89881	13	2+4 PQ(15, 6)	15 5	2033.52228	2033.52208	20
2+4 PQ(65,24)	65 23	2032.91558	2032.91481	77	2+4 PQ(54,21)	54 20	2033.53468	2033.53443	25
2+4 PQ(38, 9)	38 8	2032.92797	2032.92826	-30	2+4 PQ(27, 9)	27 8	2033.53468	2033.53489	-21
2+4 PQ(20, 3)	20 2	2032.93413	2032.93406	7	2+4 PQ(59,24)	59 23	2033.53468	2033.53514	-46
2+4 PQ(30, 6)	30 5	2032.94399	2032.94406	-7	2+4 PQ(68,30)	68 29	2033.54112	2033.54022	90
2+4 PQ(50,15)	50 14	2032.95019	2032.95020	-1	2+4 PQ(14, 6)	14 5	2033.54802	2033.54723	79
2+4 PQ(44,12)	44 11	2032.96633	2032.96566	67	2+4 RR(1, 0)	2 1	2033.55815	2033.55558	257
2+4 PQ(19, 3)	19 2	2032.96633	2032.96763	-130	2+4 PQ(35,12)	35 11	2033.56523	2033.56593	-70
2+4 PQ(55,18)	55 17	2032.97430	2032.97434	-5	2+4 PQ(42,15)	42 14	2033.57030	2033.56914	116
2+4 PQ(37, 9)	37 8	2032.99328	2032.99172	156	2+4 PQ(13, 6)	13 5	2033.57030	2033.57071	-41
2+4 PQ(29, 6)	29 5	2032.99328	2032.99428	-100	2+4 PQ(48,18)	48 17	2033.57947	2033.57878	69
2+4 PQ(18, 3)	18 2	2033.00031	2032.99953	78	2+4 PQ(26, 9)	26 8	2033.57947	2033.58005	-59
2+4 PQ(64,24)	64 23	2033.02128	2033.02227	-98	2+4 PQ(12, 6)	12 5	2033.59214	2033.59252	-37
2+4 PQ(17, 3)	17 2	2033.02980	2033.02975	5	2+4 PQ(63,27)	63 26	2033.60502	2033.60498	4
2+4 PQ(49,15)	49 14	2033.02980W	2033.03333	-353	2+4 PQ(11, 6)	11 5	2033.61263	2033.61264	-1
2+4 PQ(43,12)	43 11	2033.04148	2033.03897	251	2+4 PQ(25, 9)	25 8	2033.62357	2033.62355	2
2+4 PQ(28, 6)	28 5	2033.04148	2033.04284	-136	2+4 PQ(53,21)	53 20	2033.62357	2033.62400	-42
2+4 PQ(36, 9)	36 8	2033.05413	2033.05352	61	2+4 PQ(34,12)	34 11	2033.62357	2033.62434	-77
2+4 PQ(16, 3)	16 2	2033.05842	2033.05830	12	2+4 PQ(10, 6)	10 5	2033.63209	2033.63109	100
2+4 PQ(68,27)	68 26	2033.05842	2033.05988	-146	2+4 PQ(58,24)	58 23	2033.63209	2033.63283	-74
2+4 PQ(54,18)	54 17	2033.06474	2033.06561	-87	2+4 PQ(41,15)	41 14	2033.63906	2033.63908	-2
2+4 PQ(15, 3)	15 2	2033.08560	2033.08517	43	2+4 PQ(9, 6)	9 5	2033.64798	2033.64787	11
2+4 PQ(27, 6)	27 5	2033.08991	2033.08973	19	2+4 PQ(67,30)	67 29	2033.65351	2033.65243	108
2+4 PQ(14, 3)	14 2	2033.11179	2033.11036	143	2+4 PQ(47,18)	47 17	2033.65889	2033.65856	33
2+4 PQ(42,12)	42 11	2033.11179	2033.11063	115	2+4 PQ(24, 9)	24 8	2033.66476	2033.66538	-62
2+4 PQ(35, 9)	35 8	2033.11179	2033.11365	-186	2+4 PQ(33,12)	33 11	2033.68061	2033.68109	-49
2+4 PQ(48,15)	48 14	2033.11179W	2033.11482	-303	2+4 PQ(6, 6)	6 5	2033.68780	2033.68813	-33
2+4 PQ(63,24)	63 23	2033.12702	2033.12810	-108	2+4 PQ(23, 9)	23 8	2033.70555	2033.70554	2
2+4 PQ(13, 3)	13 2	2033.13447	2033.13387	60	2+4 PQ(40,15)	40 14	2033.70555	2033.70737	-182
2+4 PQ(26, 6)	26 5	2033.13447	2033.13495	-47	2+4 PQ(52,21)	52 20	2033.71276	2033.71193	83
2+4 PQ(53,18)	53 17	2033.15563	2033.15525	39	2+4 PQ(57,24)	57 23	2033.72792	2033.72888	-96
2+4 PQ(12, 3)	12 2	2033.15563	2033.15571	-7	2+4 PQ(32,12)	32 11	2033.73599	2033.73618	-20
2+4 PQ(34, 9)	34 8	2033.17171	2033.17213	-41	2+4 PQ(46,18)	46 17	2033.73599	2033.73669	-70
2+4 PQ(67,27)	67 26	2033.17171	2033.17214	-43	2+4 PQ(22, 9)	22 8	2033.74346	2033.74403	-57
2+4 PQ(11, 3)	11 2	2033.17854	2033.17587	267	2+4 PQ(66,30)	66 29	2033.76443	2033.76302	142
2+4 PQ(25, 6)	25 5	2033.17854	2033.17850	4	2+4 PQ(39,15)	39 14	2033.77377	2033.77401	-24
2+4 PQ(41,12)	41 11	2033.17854	2033.18064	-210	2+4 PQ(21, 9)	21 8	2033.78071	2033.78085	-13
2+4 PQ(10, 3)	10 2	2033.19465	2033.19435	30	2+4 PQ(31,12)	31 11	2033.78853	2033.78961	-108

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
1											
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5	2+4 PQ(51,21)	51 20	2033.79756	2033.79821	-65	2+4 PQ(49,24)	49 23	2034.43815	2034.43838	-22	
6	2+4 PQ(45,18)	45 17	2033.81421	2033.81317	104	2+4 PQ(14,12)	14 11	2034.44447	2034.44308	139	
7	2+4 PQ(20, 9)	20 8	2033.81421	2033.81600	-179	2+4 PQ(27,15)	27 14	2034.44447	2034.44435	12	
8	2+4 PQ(56,24)	56 23	2033.82442	2033.82330	112	2+4 RR(6, 6)	7 7	2034.44447	2034.44494	-47	
9	2+4 RR(3, 3)	4 4	2033.82958	2033.82816	141	2+4 PQ(13,12)	13 11	2034.46543	2034.46650	-107	
10	2+4 PQ(38,15)	38 14	2033.83979	2033.83899	80	2+4 PQ(35,18)	35 17	2034.48729	2034.48719	10	
11	2+4 PQ(30,12)	30 11	2033.83979	2033.84138	-159	2+4 PQ(12,12)	12 11	2034.48729	2034.48825	-96	
12	2+4 PQ(19, 9)	19 8	2033.84946	2033.84948	-2	2+4 PQ(26,15)	26 14	2034.48729	2034.48942	-213	
13	2+4 PQ(65,30)	65 29	2033.87376	2033.87198	177	2+4 PQ(42,21)	42 20	2034.50056	2034.50083	-27	
14	2+4 PQ(18, 9)	18 8	2033.88147	2033.88128	19	2+4 RR(5, 3)	6 4	2034.51138	2034.51122	16	
15	2+4 PQ(50,21)	50 20	2033.88147	2033.88286	-139	2+4 PQ(48,24)	48 23	2034.51966	2034.51969	-2	
16	2+4 PQ(44,18)	44 17	2033.89021	2033.88800	221	2+4 PQ(25,15)	25 14	2034.53252	2034.53282	-30	
17	2+4 PQ(29,12)	29 11	2033.89021	2033.89148	-128	2+4 PQ(34,18)	34 17	2034.54493	2034.54549	-57	
18	2+4 RR(2, 0)	3 1	2033.90171	2033.90125	46	2+4 PQ(41,21)	41 20	2034.57373W	2034.57066	307	
19	2+4 PQ(37,15)	37 14	2033.90171	2033.90232	-60	2+4 PQ(53,27)	53 26	2034.57373	2034.57306	66	
20	2+4 PQ(17, 9)	17 8	2033.91143	2033.91142	1	2+4 PQ(24,15)	24 14	2034.57373	2034.57455	-83	
21	2+4 PQ(60,27)	60 26	2033.91143	2033.91253	-110	2+4 RR(4, 0)	5 1	2034.58896	2034.58746	151	
22	2+4 PQ(55,24)	55 23	2033.91741	2033.91608	133	2+4 PQ(58,30)	58 29	2034.58896	2034.58924	-27	
23	2+4 PQ(16, 9)	16 8	2033.93970	2033.93989	-18	2+4 PQ(47,24)	47 23	2034.60063	2034.59935	128	
24	2+4 PQ(28,12)	28 11	2033.93970	2033.93992	-22	2+4 PQ(33,18)	33 17	2034.60063	2034.60214	-151	
25	2+4 PQ(43,18)	43 17	2033.96437W	2033.96119	318	2+4 PQ(23,15)	23 14	2034.61375	2034.61463	-87	
26	2+4 PQ(36,15)	36 14	2033.96437	2033.96398	38	2+4 PQ(40,21)	40 20	2034.63741	2034.63884	-143	
27	2+4 PQ(49,21)	49 20	2033.96437	2033.96586	-149	2+4 PQ(22,15)	22 14	2034.65275	2034.65303	-28	
28	2+4 PQ(15, 9)	15 8	2033.96437	2033.96668	-231	2+4 PQ(32,18)	32 17	2034.65749	2034.65713	36	
29	2+4 PQ(64,30)	64 29	2033.97770	2033.97933	-162	2+4 PQ(62,33)	62 32	2034.67171	2034.67206	-35	
30	2+4 PQ(27,12)	27 11	2033.98629	2033.98670	-41	2+4 PQ(46,24)	46 23	2034.67729	2034.67737	-8	
31	2+4 PQ(14, 9)	14 8	2033.99219	2033.99180	39	2+4 PQ(21,15)	21 14	2034.68923	2034.68977	-54	
32	2+4 PQ(54,24)	54 23	2034.00716	2034.00723	-6	2+4 PQ(39,21)	39 20	2034.70493	2034.70537	-43	
33	2+4 PQ(13, 9)	13 8	2034.01483	2034.01525	-41	2+4 PQ(31,18)	31 17	2034.71007	2034.71046	-39	
34	2+4 PQ(68,33)	68 32	2034.02349	2034.02343	5	2+4 PQ(20,15)	20 14	2034.72294	2034.72485	-191	
35	2+4 PQ(35,15)	35 14	2034.02349	2034.02400	-51	2+4 PQ(51,27)	51 26	2034.74699	2034.74707	-7	
36	2+4 PQ(26,12)	26 11	2034.03208	2034.03181	27	2+4 PQ(45,24)	45 23	2034.75385	2034.75375	10	
37	2+4 PQ(42,18)	42 17	2034.03208	2034.03272	-64	2+4 PQ(19,15)	19 14	2034.76081	2034.75825	255	
38	2+4 PQ(12, 9)	12 8	2034.03736	2034.03702	34	2+4 PQ(30,18)	30 17	2034.76081	2034.76213	-132	
39	2+4 PQ(48,21)	48 20	2034.04617	2034.04722	-106	2+4 PQ(38,21)	38 20	2034.76994	2034.77024	-31	
40	2+4 PQ(11, 9)	11 8	2034.05544	2034.05712	-168	2+4 RR(7, 6)	8 7	2034.78236	2034.78219	17	
41	2+4 PQ(25,12)	25 11	2034.07492	2034.07526	-34	2+4 PQ(18,15)	18 14	2034.78982	2034.78999	-18	
42	2+4 PQ(10, 9)	10 8	2034.07492	2034.07555	-62	2+4 PQ(29,18)	29 17	2034.81170	2034.81214	-44	
43	2+4 PQ(34,15)	34 14	2034.08221	2034.08235	-14	2+4 PQ(17,15)	17 14	2034.81949	2034.82006	-57	
44	2+4 PQ(53,24)	53 23	2034.09704	2034.09673	31	2+4 PQ(44,24)	44 23	2034.82800	2034.82848	-48	
45	2+4 PQ(41,18)	41 17	2034.10193	2034.10260	-67	2+4 PQ(50,27)	50 26	2034.83233	2034.83161	72	
46	2+4 PQ(58,27)	58 26	2034.10954	2034.10942	12	2+4 PQ(37,21)	37 20	2034.83233	2034.83347	-114	
47	2+4 PQ(24,12)	24 11	2034.11652	2034.11704	-52	2+4 PQ(16,15)	16 14	2034.84796	2034.84847	-50	
48	2+4 PQ(47,21)	47 20	2034.12641	2034.12694	-53	2+4 RR(6, 3)	7 4	2034.84796	2034.85020	-224	
49	2+4 PQ(33,15)	33 14	2034.13851	2034.13905	-54	2+4 PQ(28,18)	28 17	2034.86014	2034.86049	-35	
50	2+4 PQ(23,12)	23 11	2034.15676	2034.15715	-39	2+4 PQ(55,30)	55 29	2034.87456	2034.87219	238	
51	2+4 RR(4, 3)	5 4	2034.17076	2034.17054	22	2+4 PQ(15,15)	15 14	2034.87456	2034.87520	-64	
52	2+4 PQ(40,18)	40 17	2034.17076	2034.17084	-8	2+4 PQ(60,33)	60 32	2034.87456	2034.87528	-72	
53	2+4 PQ(52,24)	52 23	2034.18388	2034.18461	-72	2+4 PQ(36,21)	36 20	2034.89499	2034.89504	-5	
54	2+4 PQ(32,15)	32 14	2034.19427	2034.19408	19	2+4 PQ(43,24)	43 23	2034.90214	2034.90156	59	
55	2+4 PQ(22,12)	22 11	2034.19427	2034.19559	-132	2+4 PQ(27,18)	27 17	2034.90665	2034.90718	-52	
56	2+4 PQ(46,21)	46 20	2034.20512	2034.20501	10	2+4 PQ(49,27)	49 26	2034.91462	2034.91451	11	
57	2+4 PQ(57,27)	57 26	2034.20512	2034.20542	-30	2+4 RR(5, 0)	6 1	2034.92872	2034.92798	75	
58	2+4 PQ(21,12)	21 11	2034.23233	2034.23237	-4	2+4 PQ(26,18)	26 17	2034.95278	2034.95220	58	
59	2+4 PQ(39,18)	39 17	2034.23726	2034.23742	-16	2+4 PQ(35,21)	35 20	2034.95278	2034.95495	-217	
60	2+4 RR(3, 0)	4 1	2034.24626	2034.24521	105	2+4 PQ(54,30)	54 29	2034.96285	2034.96324	-38	
	2+4 PQ(66,33)	66 32	2034.24626	2034.24613	13	2+4 PQ(42,24)	42 23	2034.97281	2034.97299	-19	
	2+4 PQ(31,15)	31 14	2034.24626	2034.24746	-120	2+4 PQ(59,33)	59 32	2034.97281	2034.97445	-164	
	2+4 PQ(20,12)	20 11	2034.26746	2034.26748	-2	2+4 PQ(25,18)	25 17	2034.99387	2034.99557	-170	
	2+4 PQ(45,21)	45 20	2034.28070	2034.28144	-74	2+4 PQ(48,27)	48 26	2034.99387	2034.99578	-191	
	2+4 PQ(61,30)	61 29	2034.28979	2034.29161	-181	2+4 PQ(34,21)	34 20	2035.01259	2035.01321	-62	
	2+4 PQ(30,15)	30 14	2034.29998	2034.29918	80	2+4 PQ(24,18)	24 17	2035.03702	2035.03727	-25	
	2+4 PQ(56,27)	56 26	2034.29998	2034.29978	20	2+4 PQ(41,24)	41 23	2035.04240	2035.04278	-38	
	2+4 PQ(19,12)	19 11	2034.29998	2034.30092	-94	2+4 PQ(53,30)	53 29	2035.05293	2035.05265	28	
	2+4 PQ(38,18)	38 17	2034.29998	2034.30234	-236	2+4 RR(9, 9)	10 10	2035.06141	2035.06059	82	
	2+4 PQ(18,12)	18 11	2034.33241	2034.33269	-28	2+4 PQ(33,21)	33 20	2035.06769	2035.06982	-213	
	2+4 PQ(29,15)	29 14	2034.34842	2034.34923	-81	2+4 PQ(47,27)	47 26	2035.07596	2035.07539	56	
	2+4 PQ(65,33)	65 32	2034.35575	2034.35505	70	2+4 PQ(23,18)	23 17	2035.07596	2035.07730	-134	
	2+4 PQ(50,24)	50 23	2034.35575	2034.35543	32	2+4 PQ(67,39)	67 38	2035.10801	2035.10959	-158	
	2+4 PQ(44,21)	44 20	2034.35575	2034.35622	-46	2+4 PQ(40,24)	40 23	2035.10801	2035.11091	-291	
	2+4 PQ(37,18)	37 17	2034.36562	2034.36561	1	2+4 PQ(22,18)	22 17	2035.11677	2035.11568	110	
	2+4 PQ(16,12)	16 11	2034.39161	2034.39123	38	2+4 RR(8, 6)	9 7	2035.11677	2035.11775	-97	
	2+4 PQ(60,30)	60 29	2034.39161	2034.39244	-84	2+4 PQ(32,21)	32 20	2035.12442	2035.12476	-34	
	2+4 PQ(55,27)	55 26	2034.39161	2034.39251	-90	2+4 PQ(52,30)	52 29	2035.13952	2035.14043	-91	
	2+4 PQ(28,15)	28 14	2034.39728	2034.39762	-34	2+4 PQ(21,18)	21 17	2035.15243	2035.15238	4	
	2+4 PQ(15,12)	15 11	2034.41720	2034.41799	-79	2+4 PQ(46,27)	46 26	2035.15243	2035.15337	-95	
	2+4 PQ(36,18)	36 17	2034.42770	2034.42723	47	2+4 PQ(57,33)	57 32	2035.16816	2035.16790	27	
	2+4 PQ(43,21)	43 20	2034.42770	2034.42935	-165	2+4 PQ(39,24)	39 23	2035.17746	2035.17740	6	

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	PQ(31,21)	31	20	2035.17746	2035.17805	-59		2+4	PQ(25,24)	25	23	2035.93264	2035.93447	-184					
2+4	PQ(20,18)	20	17	2035.18767	2035.18743	25		2+4	RR(8, 0)	9	1	2035.93945	2035.93922	23					
2+4	RR(7, 3)	8	4	2035.18767	2035.18749	18		2+4	PQ(59,39)	59	38	2035.94654	2035.94787	-133					
2+4	PQ(66,39)	66	38	2035.22019	2035.22005	14		2+4	PQ(48,33)	48	32	2035.95944	2035.95753	191					
2+4	PQ(19,18)	19	17	2035.22019	2035.22080	-61		2+4	PQ(34,27)	34	26	2035.95944	2035.96058	-115					
2+4	PQ(51,30)	51	29	2035.22876	2035.22657	219		2+4	PQ(24,24)	24	23	2035.97580	2035.97611	-32					
2+4	PQ(30,21)	30	20	2035.22876	2035.22968	-92		2+4	PQ(41,30)	41	29	2035.99689	2035.99769	-80					
2+4	PQ(45,27)	45	26	2035.22876	2035.22970	-94		2+4	RR(13,12)	14	13	2036.00515	2036.00455	60					
2+4	PQ(38,24)	38	23	2035.24225	2035.24223	2		2+4	PQ(33,27)	33	26	2036.01759	2036.01712	47					
2+4	PQ(18,18)	18	17	2035.25026	2035.25251	-226		2+4	PQ(63,42)	63	41	2036.03365	2036.03203	162					
2+4	PQ(56,33)	56	32	2035.26030	2035.26217	-187		2+4	PR(7, 3)	8	2	2036.03365	2036.03273	92					
2+4	RR(6, 0)	7	1	2035.26729	2035.26678	51		2+4	PQ(47,33)	47	32	2036.03746	2036.03708	38					
2+4	PQ(29,21)	29	20	2035.27910	2035.27966	-56		2+4	PQ(58,39)	58	38	2036.04473	2036.04534	-61					
2+4	PQ(44,27)	44	26	2035.30468	2035.30439	29		2+4	RR(12, 9)	13	10	2036.05305	2036.05173	132					
2+4	PQ(37,24)	37	23	2035.30468	2035.30542	-74		2+4	PQ(40,30)	40	29	2036.06536	2036.06576	-40					
2+4	PQ(50,30)	50	29	2035.31138	2035.31107	31		2+4	PQ(32,27)	32	26	2036.07215	2036.07200	15					
2+4	PQ(28,21)	28	20	2035.32773	2035.32797	-24		2+4	PQ(67,45)	67	44	2036.09170	2036.09251	-80					
2+4	PQ(65,39)	65	38	2035.32773	2035.32889	-116		2+4	PQ(52,36)	52	35	2036.10839	2036.10819	20					
2+4	PQ(55,33)	55	32	2035.35464	2035.35482	-18		2+4	RR(11, 6)	12	7	2036.11492	2036.11419	73					
2+4	PR(5, 3)	6	2	2035.35464	2035.35635	-171		2+4	PQ(46,33)	46	32	2036.11492	2036.11498	-6					
2+4	PQ(36,24)	36	23	2035.36629	2035.36695	-66		2+4	PQ(31,27)	31	26	2036.12486	2036.12522	-35					
2+4	PQ(27,21)	27	20	2035.37537	2035.37462	75		2+4	PQ(39,30)	39	29	2036.13198	2036.13217	-19					
2+4	PQ(43,27)	43	26	2035.37537	2035.37743	-206		2+4	PQ(30,27)	30	26	2036.17691	2036.17679	13					
2+4	RR(10, 9)	11	10	2035.39325	2035.39268	57		2+4	RR(10, 3)	11	4	2036.19028	2036.18918	110					
2+4	PQ(49,30)	49	29	2035.39325	2035.39393	-68		2+4	PQ(45,33)	45	32	2036.19028	2036.19125	-97					
2+4	PQ(26,21)	26	20	2035.41867	2035.41961	-94		2+4	PQ(51,36)	51	35	2036.19590	2036.19426	163					
2+4	PQ(35,24)	35	23	2035.42615	2035.42682	-67		2+4	PQ(38,30)	38	29	2036.19590	2036.19694	-104					
2+4	PQ(42,27)	42	26	2035.45080	2035.44882	197		2+4	PQ(29,27)	29	26	2036.22667	2036.22670	-3					
2+4	RR(9, 6)	10	7	2035.45080	2035.45160	-80		2+4	PQ(56,39)	56	38	2036.23587	2036.23540	47					
2+4	PQ(25,21)	25	20	2035.46214	2035.46294	-80		2+4	PQ(37,30)	37	29	2036.25980	2036.26005	-25					
2+4	PQ(48,30)	48	29	2035.47527	2035.47515	12		2+4	PQ(44,33)	44	32	2036.26575	2036.26587	-11					
2+4	PQ(34,24)	34	23	2035.48434	2035.48504	-70		2+4	RR(9, 0)	10	1	2036.27320	2036.27286	34					
2+4	PQ(24,21)	24	20	2035.50470	2035.50461	9		2+4	PQ(28,27)	28	26	2036.27320	2036.27495	-175					
2+4	PQ(41,27)	41	26	2035.51777	2035.51857	-80		2+4	PQ(50,36)	50	35	2036.27897	2036.27870	27					
2+4	RR(8, 3)	9	4	2035.52496	2035.52308	188		2+4	RR(15,15)	16	16	2036.30008	2036.29942	65					
2+4	PQ(53,33)	53	32	2035.53460	2035.53521	-61		2+4	PQ(36,30)	36	29	2036.32140	2036.32152	-12					
2+4	PQ(33,24)	33	23	2035.54121	2035.54161	-40		2+4	PQ(27,27)	27	26	2036.32140	2036.32154	-14					
2+4	PQ(63,39)	63	38	2035.54121	2035.54171	-50		2+4	RR(14,12)	15	13	2036.33016	2036.32970	46					
2+4	PQ(23,21)	23	20	2035.54121W	2035.54462	-340		2+4	PQ(43,33)	43	32	2036.33830	2036.33884	-54					
2+4	PQ(47,30)	47	29	2035.55448	2035.55473	-26		2+4	PQ(60,42)	60	41	2036.33830	2036.33901	-71					
2+4	PQ(22,21)	22	20	2035.58489	2035.58296	193		2+4	PQ(49,36)	49	35	2036.36200	2036.36150	51					
2+4	PQ(40,27)	40	26	2035.58489	2035.58667	-178		2+4	PR(8, 3)	9	2	2036.36873	2036.36839	34					
2+4	PQ(32,24)	32	23	2035.59622	2035.59652	-30		2+4	RR(13, 9)	14	10	2036.37960	2036.37869	91					
2+4	RR(7, 0)	8	1	2035.60348	2035.60386	-38		2+4	PQ(35,30)	35	29	2036.37960	2036.38133	-173					
2+4	PQ(21,21)	21	20	2035.62142	2035.61964	178		2+4	PQ(42,33)	42	32	2036.40918	2036.41017	-99					
2+4	PQ(52,33)	52	32	2035.62142	2035.62295	-153		2+4	PQ(64,45)	64	44	2036.41979	2036.41888	90					
2+4	PQ(46,30)	46	29	2035.63259	2035.63267	-8		2+4	PQ(54,39)	54	38	2036.41979	2036.41894	85					
2+4	PQ(62,39)	62	38	2035.64480	2035.64569	-89		2+4	PQ(59,42)	59	41	2036.43737	2036.43809	-72					
2+4	PQ(31,24)	31	23	2035.65189	2035.64977	211		2+4	PQ(34,30)	34	29	2036.43737	2036.43949	-212					
2+4	PQ(39,27)	39	26	2035.65189	2035.65311	-123		2+4	PQ(48,36)	48	35	2036.44328	2036.44266	63					
2+4	PQ(57,36)	57	35	2035.65189	2035.65330	-142		2+4	RR(12, 6)	13	7	2036.44328	2036.44293	35					
2+4	RR(12,12)	13	13	2035.67835	2035.67768	67		2+4	PQ(41,33)	41	32	2036.48006	2036.47985	21					
2+4	PR(6, 3)	7	2	2035.69389	2035.69539	-150		2+4	PQ(33,30)	33	29	2036.49598	2036.49599	-2					
2+4	PQ(30,24)	30	23	2035.70094	2035.70137	-43		2+4	PQ(53,39)	53	38	2036.50938	2036.50826	112					
2+4	PQ(45,30)	45	29	2035.70852	2035.70897	-45		2+4	RR(11, 3)	12	4	2036.52027	2036.51968	60					
2+4	PQ(51,33)	51	32	2035.70852	2035.70905	-53		2+4	PQ(47,36)	47	35	2036.52027	2036.52218	-190					
2+4	PQ(66,42)	66	41	2035.70852	2035.71045	-193		2+4	PQ(58,42)	58	41	2036.53593	2036.53554	39					
2+4	PQ(38,27)	38	26	2035.71771	2035.71791	-20		2+4	PQ(40,33)	40	32	2036.54858	2036.54789	69					
2+4	RR(11, 9)	12	10	2035.72401	2035.72306	95		2+4	PQ(32,30)	32	29	2036.54858	2036.55085	-227					
2+4	PQ(61,39)	61	38	2035.74995	2035.74804	191		2+4	PQ(52,39)	52	38	2036.59486	2036.59594	-108					
2+4	PQ(29,24)	29	23	2035.74995	2035.75131	-136		2+4	PQ(31,30)	31	29	2036.60305	2036.60404	-99					
2+4	PQ(37,27)	37	26	2035.78312	2035.78106	206		2+4	RR(10, 0)	11	1	2036.60305	2036.60477	-171					
2+4	PQ(44,30)	44	29	2035.78312	2035.78362	-50		2+4	PQ(39,33)	39	32	2036.61405	2036.61428	-22					
2+4	RR(10, 6)	11	7	2035.78312	2035.78374	-62		2+4	RR(16,15)	17	16	2036.62152	2036.62101	52					
2+4	PQ(50,33)	50	32	2035.79219	2035.79352	-133		2+4	PQ(62,45)	62	44	2036.62913	2036.62837	76					
2+4	PQ(28,24)	28	23	2035.79924	2035.79959	-35		2+4	PQ(57,42)	57	41	2036.62913	2036.63136	-223					
2+4	PQ(65,42)	65	41	2035.82007	2035.81926	81		2+4	RR(15,12)	16	13	2036.65366	2036.65314	52					
2+4	PQ(36,27)	36	26	2035.84235	2035.84255	-20		2+4	PQ(45,36)	45	35	2036.67924	2036.67629	295					
2+4	PQ(27,24)	27	23	2035.84706	2035.84621	84		2+4	PQ(38,33)	38	32	2036.67924	2036.67902	23					
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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 PQ(55,42)	55	41	2036.81805	2036.81812	-7	2+4 RR(14, 0)	15	1	2037.91533	2037.91515	17
2+4 PQ(43,36)	43	35	2036.82421	2036.82383	37	2+4 RR(19,12)	20	13	2037.93049	2037.92968	81
2+4 PQ(60,45)	60	44	2036.83130	2036.83136	-6	2+4 RR(18, 9)	19	10	2037.98830	2037.98781	49
2+4 RR(12, 3)	13	4	2036.84896	2036.84848	49	2+4 PR(13, 3)	14	2	2038.02202	2038.02130	72
2+4 PQ(49,39)	49	38	2036.84896	2036.84918	-21	2+4 RR(17, 6)	18	7	2038.06134	2038.06104	30
2+4 PQ(35,33)	35	32	2036.86199	2036.86333	-134	2+4 PQ(46,45)	46	44	2038.06812	2038.06979	-168
2+4 PQ(42,36)	42	35	2036.89564	2036.89514	51	2+4 PQ(52,48)	52	47	2038.07362	2038.07249	113
2+4 PQ(34,33)	34	32	2036.92031	2036.92147	-115	2+4 PQ(57,51)	57	50	2038.11427	2038.11410	16
2+4 RR(18,18)	19	19	2036.93033	2036.92985	48	2+4 PR(12, 6)	13	5	2038.13165	2038.13090	75
2+4 PQ(48,39)	48	38	2036.93033	2036.93031	2	2+4 PQ(45,45)	45	44	2038.14749	2038.14598	151
2+4 PQ(59,45)	59	44	2036.93033	2036.93042	-9	2+4 RR(16, 3)	17	4	2038.14749	2038.14665	85
2+4 RR(11, 0)	12	1	2036.93567	2036.93495	71	2+4 PQ(51,48)	51	47	2038.15845	2038.15850	-5
2+4 RR(17,15)	18	16	2036.94164	2036.94087	77	2+4 RR(22,18)	23	19	2038.18497	2038.18429	67
2+4 PQ(41,36)	41	35	2036.96485	2036.96480	5	2+4 RR(23,21)	24	22	2038.19404	2038.19371	33
2+4 RR(16,12)	17	13	2036.97554	2036.97485	69	2+4 RR(21,15)	22	16	2038.20335	2038.20302	33
2+4 PQ(53,42)	53	41	2037.00017	2036.99835	182	2+4 RR(24,24)	25	25	2038.23795	2038.23790	4
2+4 PQ(47,39)	47	38	2037.00930	2037.00981	-51	2+4 RR(15, 0)	16	1	2038.23795	2038.23843	-48
2+4 PQ(63,48)	63	47	2037.01819	2037.01879	-59	2+4 RR(20,12)	21	13	2038.24520	2038.24452	68
2+4 RR(15, 9)	16	10	2037.02813	2037.02748	65	2+4 RR(19, 9)	20	10	2038.30503	2038.30449	54
2+4 PQ(58,45)	58	44	2037.02813	2037.02786	27	2+4 PQ(49,48)	49	47	2038.32615	2038.32561	54
2+4 PQ(40,36)	40	35	2037.03426	2037.03281	144	2+4 PR(14, 3)	15	2	2038.34577	2038.34680	-103
2+4 PR(10, 3)	11	2	2037.03426	2037.03463	-37	2+4 RR(18, 6)	19	7	2038.38017	2038.37953	63
2+4 PQ(67,51)	67	50	2037.08182	2037.08313	-131	2+4 PQ(54,51)	54	50	2038.39088	2038.39171	-83
2+4 PQ(52,42)	52	41	2037.08641	2037.08601	40	2+4 PQ(48,48)	48	47	2038.40697	2038.40671	26
2+4 PQ(46,39)	46	38	2037.08641	2037.08767	-126	2+4 PR(13, 6)	14	5	2038.45823	2038.45813	9
2+4 RR(14, 6)	15	7	2037.09603	2037.09530	73	2+4 RR(17, 3)	18	4	2038.46735	2038.46693	42
2+4 PQ(45,39)	45	38	2037.16579	2037.16388	190	2+4 PQ(53,51)	53	50	2038.48081	2038.48099	-17
2+4 PQ(38,36)	38	35	2037.16579	2037.16390	189	2+4 RR(23,18)	24	19	2038.49389	2038.49356	33
2+4 RR(13, 3)	14	4	2037.17651	2037.17557	94	2+4 RR(24,21)	25	22	2038.50130	2038.50096	34
2+4 PQ(66,51)	66	50	2037.19333	2037.19351	-18	2+4 RR(22,15)	23	16	2038.51445	2038.51424	21
2+4 PQ(56,45)	56	44	2037.21963	2037.21784	179	2+4 RR(25,24)	26	25	2038.54299	2038.54306	-6
2+4 PQ(61,48)	61	47	2037.22609	2037.22501	109	2+4 RR(21,12)	22	13	2038.55865	2038.55763	102
2+4 PQ(37,36)	37	35	2037.22609	2037.22696	-87	2+4 RR(16, 0)	17	1	2038.55865	2038.55997	-133
2+4 PQ(44,39)	44	38	2037.23804	2037.23846	-42	2+4 RR(20, 9)	21	10	2038.61998	2038.61946	52
2+4 RR(19,18)	20	19	2037.24645	2037.24606	38	2+4 PQ(51,51)	51	50	2038.65381	2038.65464	-83
2+4 RR(18,15)	19	16	2037.25887	2037.25900	-12	2+4 PR(15, 3)	16	2	2038.67140	2038.67061	79
2+4 PQ(36,36)	36	35	2037.28625	2037.28838	-213	2+4 RR(19, 6)	20	7	2038.69659	2038.69632	27
2+4 RR(17,12)	18	13	2037.29529	2037.29485	45	2+4 PR(14, 6)	15	5	2038.78534	2038.78367	167
2+4 PQ(65,51)	65	50	2037.30230	2037.30228	2	2+4 RR(18, 3)	19	4	2038.78534	2038.78551	-17
2+4 PQ(55,45)	55	44	2037.31042	2037.31039	4	2+4 RR(24,18)	25	19	2038.80152	2038.80109	43
2+4 PQ(43,39)	43	38	2037.31042	2037.31139	-96	2+4 RR(25,21)	26	22	2038.80696	2038.80646	50
2+4 PQ(49,42)	49	41	2037.33944	2037.33919	24	2+4 RR(23,15)	24	16	2038.82416	2038.82372	44
2+4 RR(16, 9)	17	10	2037.35005	2037.34930	74	2+4 RR(26,24)	27	25	2038.84655	2038.84645	10
2+4 PR(11, 3)	12	2	2037.36444	2037.36521	-77	2+4 RR(22,12)	23	13	2038.86974	2038.86902	72
2+4 PQ(42,39)	42	38	2037.38410	2037.38267	143	2+4 RR(17, 0)	18	1	2038.88010	2038.87979	31
2+4 PQ(54,45)	54	44	2037.40167	2037.40130	37	2+4 PR(13, 9)	14	8	2038.90132	2038.90263	-131
2+4 PQ(64,51)	64	50	2037.40784	2037.40944	-160	2+4 RR(27,27)	28	28	2038.92909	2038.92903	6
2+4 RR(15, 6)	16	7	2037.42008	2037.41892	116	2+4 RR(21, 9)	22	10	2038.93408	2038.93271	137
2+4 PQ(48,42)	48	41	2037.42008	2037.42031	-24	2+4 PR(16, 3)	17	2	2038.99278	2038.99272	6
2+4 PQ(41,39)	41	38	2037.45298	2037.45231	67	2+4 RR(20, 6)	21	7	2039.01185	2039.01139	46
2+4 PQ(53,45)	53	44	2037.49117	2037.49059	58	2+4 RR(19, 3)	20	4	2039.10248	2039.10238	10
2+4 PQ(47,42)	47	41	2037.50153	2037.49980	174	2+4 RR(25,18)	26	19	2039.10903	2039.10688	215
2+4 RR(14, 3)	15	4	2037.50153	2037.50097	56	2+4 PR(15, 6)	16	5	2039.10903	2039.10752	152
2+4 PQ(40,39)	40	38	2037.52073	2037.52031	42	2+4 RR(26,21)	27	22	2039.10903	2039.11022	-118
2+4 PQ(58,48)	58	47	2037.52073	2037.52215	-142	2+4 RR(24,15)	25	16	2039.13196	2039.13148	48
2+4 RR(20,18)	21	19	2037.56085	2037.56055	30	2+4 RR(27,24)	28	25	2039.14811	2039.14808	3
2+4 RR(21,21)	22	22	2037.57488	2037.57396	92	2+4 RR(23,12)	24	13	2039.17910	2039.17869	41
2+4 RR(19,15)	20	16	2037.57488	2037.57540	-52	2+4 RR(18, 0)	19	1	2039.19805	2039.19787	17
2+4 RR(13, 0)	14	1	2037.59068	2037.59015	53	2+4 PR(14, 9)	15	8	2039.22815	2039.22820	-5
2+4 RR(18,12)	19	13	2037.61375	2037.61313	62	2+4 RR(28,27)	29	28	2039.22815	2039.22843	-29
2+4 PQ(62,51)	62	50	2037.62035	2037.61888	146	2+4 RR(22, 9)	23	10	2039.24458	2039.24425	34
2+4 PQ(45,42)	45	41	2037.65405	2037.65384	21	2+4 PR(17, 3)	18	2	2039.31293	2039.31314	-21
2+4 RR(17, 9)	18	10	2037.67019	2037.66941	78	2+4 RR(21, 6)	22	7	2039.32526	2039.32475	51
2+4 PR(12, 3)	13	2	2037.69352	2037.69410	-58	2+4 RR(26,18)	27	19	2039.41180	2039.41093	88
2+4 PQ(56,48)	56	47	2037.71379	2037.71212	167	2+4 RR(27,21)	28	22	2039.41180	2039.41222	-41
2+4 PQ(61,51)	61	50	2037.72118	2037.72117	1	2+4 RR(20, 3)	21	4	2039.41855	2039.41754	101
2+4 PQ(44,42)	44	41	2037.72801	2037.72839	-39	2+4 PR(16, 6)	17	5	2039.42918	2039.42967	-49
2+4 RR(16, 6)	17	7	2037.74125	2037.74083	42	2+4 RR(25,15)	26	16	2039.43792	2039.43750	42
2+4 PQ(50,45)	50	44	2037.74827	2037.74864	-37	2+4 RR(28,24)	29	25	2039.44785	2039.44795	-10
2+4 PR(11, 6)	12	5	2037.80352	2037.80198	154	2+4 RR(24,12)	25	13	2039.48697	2039.48663	34
2+4 PQ(55,48)	55	47	2037.80352	2037.80466	-114	2+4 RR(19, 0)	20	1	2039.51438	2039.51423	15
2+4 RR(15, 3)	16	4	2037.82460	2037.82466	-6	2+4 RR(29,27)	30	28	2039.52587	2039.52606	-19
2+4 PQ(49,45)	49	44	2037.83169	2037.83139	30	2+4 PR(15, 9)	16	8	2039.55474	2039.55207	267
2+4 PQ(42,42)	42	41	2037.87388	2037.87258	130	2+4 RR(23, 9)	24	10	2039.55474	2039.55407	68
2+4 RR(21,18)	22	19	2037.87388	2037.87329	59	2+4 PR(18, 3)	19	2	2039.63153	2039.63185	-32
2+4 RR(22,21)	23	22	2037.88430	2037.88471	-41	2+4 RR(22, 6)	23	7	2039.63676	2039.63639	37
2+4 RR(20,15)	21	16	2037.89093	2037.89007	86	2+4 RR(30,30)	31	31	2039.65521	2039.65578	-57
2+4 PQ(54,48)	54	47	2037.89717	2037.89557	161	2+4 RR(28,21)	29	22	2039.71316	2039.71247	69

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(I)		(II)		(III)	(IV)	(V)	(I)		(II)	(III)	(IV)	(V)	
2+4	RR(27,18)	28	19	2039.71316	2039.71324	-8	2+4	RR(35,27)	36	28	2041.27370	2041.27452	-82
2+4	RR(21, 3)	22	4	2039.73136	2039.73100	36	2+4	PR(19,12)	20	11	2041.28306	2041.28200	107
2+4	RR(26,15)	27	16	2039.74417	2039.74180	237	2+4	RR(36,33)	37	34	2041.28306	2041.28372	-65
2+4	RR(29,24)	30	25	2039.74417	2039.74605	-188	2+4	RR(30,12)	31	13	2041.29837	2041.29806	31
2+4	RR(25,12)	26	13	2039.79343	2039.79285	58	2+4	PR(22, 6)	23	5	2041.32693	2041.32697	-4
2+4	RR(30,27)	31	28	2039.82166	2039.82191	-26	2+4	RR(25, 0)	26	1	2041.37675	2041.37593	82
2+4	RR(20, 0)	21	1	2039.82938	2039.82885	53	2+4	RR(29, 9)	30	10	2041.37675	2041.37687	-12
2+4	RR(24, 9)	25	10	2039.86222	2039.86216	6	2+4	RR(36,30)	37	31	2041.38928	2041.38969	-41
2+4	PR(16, 9)	17	8	2039.87423	2039.87426	-2	2+4	PR(21, 9)	22	8	2041.45947	2041.45978	-30
2+4	RR(23, 6)	24	7	2039.94794	2039.94632	162	2+4	RR(28, 6)	29	7	2041.47055	2041.47023	32
2+4	PR(19, 3)	20	2	2039.94794	2039.94887	-93	2+4	RR(34,21)	35	22	2041.47739	2041.47723	17
2+4	RR(31,30)	32	31	2039.94794	2039.94925	-131	2+4	RR(33,18)	34	19	2041.49136	2041.49054	83
2+4	RR(29,21)	30	22	2040.01239	2040.01097	141	2+4	RR(35,24)	36	25	2041.49734	2041.49768	-34
2+4	RR(28,18)	29	19	2040.01239	2040.01381	-142	2+4	PR(24, 3)	25	2	2041.50859	2041.50848	11
2+4	RR(30,24)	31	25	2040.04343	2040.04240	103	2+4	RR(32,15)	33	16	2041.53162	2041.53117	45
2+4	RR(22, 3)	23	4	2040.04343	2040.04274	68	2+4	RR(37,36)	38	37	2041.53162	2041.53295	-133
2+4	RR(27,15)	28	16	2040.04343	2040.04436	-93	2+4	RR(36,27)	37	28	2041.55998	2041.55971	27
2+4	PR(18, 6)	19	5	2040.06825	2040.06888	-63	2+4	RR(37,33)	38	34	2041.56504	2041.56560	-56
2+4	RR(26,12)	27	13	2040.09769	2040.09734	34	2+4	RR(27, 3)	28	4	2041.57592	2041.57582	10
2+4	RR(31,27)	32	28	2040.11573	2040.11599	-26	2+4	RR(31,12)	32	13	2041.59430	2041.59392	38
2+4	RR(21, 0)	22	1	2040.14206	2040.14173	33	2+4	PR(23, 6)	24	5	2041.63723	2041.63724	-1
2+4	RR(25, 9)	26	10	2040.16889	2040.16854	35	2+4	RR(37,30)	38	31	2041.67327	2041.67240	87
2+4	PR(17, 9)	18	8	2040.19307	2040.19475	-168	2+4	RR(30, 9)	31	10	2041.67327	2041.67465	-139
2+4	RR(32,30)	33	31	2040.24035	2040.24092	-57	2+4	RR(26, 0)	27	1	2041.68031	2041.68014	18
2+4	RR(24, 6)	25	7	2040.25471	2040.25454	17	2+4	RR(35,21)	36	22	2041.76549	2041.76522	27
2+4	PR(20, 3)	21	2	2040.26394	2040.26419	-26	2+4	RR(29, 6)	30	7	2041.77054	2041.76985	69
2+4	RR(30,21)	31	22	2040.30811	2040.30773	39	2+4	PR(22, 9)	23	8	2041.77054	2041.77180	-125
2+4	RR(29,18)	30	19	2040.31317	2040.31264	53	2+4	RR(34,18)	35	19	2041.78207	2041.78066	142
2+4	RR(31,24)	32	25	2040.33697	2040.33698	-1	2+4	RR(36,24)	37	25	2041.78207	2041.78345	-138
2+4	RR(28,15)	29	16	2040.34561	2040.34519	42	2+4	RR(38,36)	39	37	2041.81151	2041.81207	-56
2+4	RR(23, 3)	24	4	2040.35305	2040.35278	27	2+4	PR(25, 3)	26	2	2041.81151W	2041.81531	-380
2+4	PR(19, 6)	20	5	2040.38489	2040.38595	-106	2+4	RR(33,15)	34	16	2041.82348	2041.82333	15
2+4	RR(27,12)	28	13	2040.40047	2040.40011	36	2+4	RR(37,27)	38	28	2041.84391	2041.84313	78
2+4	RR(32,27)	33	28	2040.40812	2040.40829	-17	2+4	RR(38,33)	39	34	2041.84391	2041.84567	-177
2+4	RR(33,33)	34	34	2040.42623	2040.42719	-96	2+4	RR(28, 3)	29	4	2041.87730	2041.87730	0
2+4	RR(22, 0)	23	1	2040.45311	2040.45288	22	2+4	RR(32,12)	33	13	2041.88827	2041.88806	21
2+4	RR(26, 9)	27	10	2040.47349	2040.47321	29	2+4	PR(21,12)	22	11	2041.91134	2041.91119	15
2+4	PR(18, 9)	19	8	2040.51373	2040.51355	18	2+4	PR(24, 6)	25	5	2041.94575	2041.94582	-6
2+4	RR(33,30)	34	31	2040.53044	2040.53080	-36	2+4	RR(38,30)	39	31	2041.95317	2041.95332	-15
2+4	RR(25, 6)	26	7	2040.56140	2040.56104	36	2+4	RR(31, 9)	32	10	2041.97097	2041.97071	26
2+4	PR(21, 3)	22	2	2040.57791	2040.57782	9	2+4	RR(27, 0)	28	1	2041.98280	2041.98261	19
2+4	RR(31,21)	32	22	2040.60291	2040.60273	18	2+4	RR(36,21)	37	22	2042.05159	2042.05147	12
2+4	RR(30,18)	31	19	2040.61008	2040.60972	36	2+4	RR(37,24)	38	25	2042.06810	2042.06746	64
2+4	RR(32,24)	33	25	2040.62980	2040.62980	0	2+4	RR(30, 6)	31	7	2042.06810	2042.06776	35
2+4	RR(29,15)	30	16	2040.64449	2040.64428	20	2+4	RR(35,18)	36	19	2042.06810	2042.06904	-93
2+4	PR(17,12)	18	11	2040.64449	2040.64603	-154	2+4	PR(23, 9)	24	8	2042.08172	2042.08212	-40
2+4	RR(24, 3)	25	4	2040.66133	2040.66111	23	2+4	RR(39,36)	40	37	2042.08868	2042.08935	-67
2+4	RR(33,27)	34	28	2040.69995	2040.69881	114	2+4	RR(34,15)	35	16	2042.11396	2042.11376	21
2+4	RR(28,12)	29	13	2040.69995	2040.70116	-121	2+4	PR(26, 3)	27	2	2042.12343W	2042.12042	301
2+4	PR(20, 6)	21	5	2040.69995	2040.70132	-137	2+4	RR(39,33)	40	34	2042.12343	2042.12394	-50
2+4	RR(34,33)	35	34	2040.71379	2040.71451	-72	2+4	RR(38,27)	39	28	2042.12343	2042.12477	-134
2+4	RR(23, 0)	24	1	2040.76268	2040.76230	38	2+4	RR(39,39)	40	40	2042.13582	2042.13731	-149
2+4	RR(27, 9)	28	10	2040.77648	2040.77615	33	2+4	RR(29, 3)	30	4	2042.17915	2042.17706	208
2+4	RR(34,30)	35	31	2040.81856	2040.81889	-33	2+4	RR(33,12)	34	13	2042.17915	2042.18047	-132
2+4	PR(19, 9)	20	8	2040.83077	2040.83065	12	2+4	PR(22,12)	23	11	2042.22226	2042.22325	-98
2+4	RR(26, 6)	27	7	2040.86615	2040.86582	33	2+4	RR(39,30)	40	31	2042.23228	2042.23245	-16
2+4	PR(22, 3)	23	2	2040.88995	2040.88974	21	2+4	PR(25, 6)	26	5	2042.25269	2042.25269	0
2+4	RR(32,21)	33	22	2040.89619	2040.89598	21	2+4	RR(32, 9)	33	10	2042.26518	2042.26505	13
2+4	RR(31,18)	32	19	2040.90534	2040.90507	27	2+4	RR(28, 0)	29	1	2042.28354	2042.28334	20
2+4	RR(33,24)	34	25	2040.92100	2040.92086	14	2+4	RR(37,21)	38	22	2042.33605	2042.33596	8
2+4	RR(30,15)	31	16	2040.94197	2040.94165	33	2+4	RR(38,24)	39	25	2042.34969	2042.34971	-1
2+4	RR(25, 3)	26	4	2040.96716	2040.96772	-57	2+4	RR(36,18)	37	19	2042.35601	2042.35567	34
2+4	RR(34,27)	35	28	2040.98738	2040.98755	-17	2+4	RR(31, 6)	32	7	2042.36417	2042.36394	24
2+4	RR(35,33)	36	34	2040.99999	2041.00002	-3	2+4	RR(40,36)	41	37	2042.36417	2042.36480	-62
2+4	RR(29,12)	30	13	2040.99999	2041.00047	-48	2+4	PR(24, 9)	25	8	2042.39033	2042.39074	-42
2+4	PR(21, 6)	22	5	2041.01508	2041.01499	9	2+4	RR(40,33)	41	34	2042.40235	2042.40039	196
2+4	RR(24, 0)	25	1	2041.07021	2041.06998	22	2+4	RR(35,15)	36	16	2042.40235	2042.40245	-10
2+4	RR(28, 9)	29	10	2041.07771	2041.07737	34	2+4	RR(39,27)	40	28	2042.40235	2042.40464	-229
2+4	RR(35,30)	36	31	2041.10473	2041.10519	-46	2+4	RR(40,39)	41	40	2042.41061	2042.41167	-106
2+4	PR(20, 9)	21	8	2041.14612	2041.14606	6	2+4	PR(27, 3)	28	2	2042.42387	2042.42384	3
2+4	RR(27, 6)	28	7	2041.16922	2041.16889	34	2+4	RR(34,12)	35	13	2042.47276	2042.47115	162
2+4	RR(33,21)	34	22	2041.18756	2041.18748	8	2+4	RR(30, 3)	31	4	2042.47276	2042.47512	-235
2+4	RR(32,18)	33	19	2041.19915	2041.19867	48	2+4	RR(40,30)	41	31	2042.50973	2042.50979	-6
2+4	PR(23, 3)	24	2	2041.19915	2041.19996	-81	2+4	PR(20,18)	21	17	2042.51727	2042.51703	23
2+4	RR(34,24)	35	25	2041.21015	2041.21015	0	2+4	PR(23,12)	24	11	2042.53490	2042.53361	129
2+4	RR(31,15)	32	16	2041.23761	2041.23728	34	2+4	RR(33, 9)	34	10	2042.55785	2042.55767	18
2+4	RR(36,36)	37	37	2041.25099	2041.25200	-101	2+4	PR(26, 6)	27	5	2042.55785	2042.55787	-2
2+4	RR(26, 3)	27	4	2041.27370	2041.27263	107	2+4	RR(29, 0)	30	1	2042.58251	2042.58234	17

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 RR(38,21)	39	22	2042.61879	2042.61870	8	2+4 RR(45,39)	46	40	2043.75569	2043.75564	4
2+4 RR(39,24)	40	25	2042.63020	2042.63019	1	2+4 PR(27,12)	28	11	2043.75569	2043.75810	-241
2+4 RR(41,36)	42	37	2042.63919	2042.63841	78	2+4 RR(33, 0)	34	1	2043.76190	2043.76092	98
2+4 RR(37,18)	38	19	2042.63919	2042.64057	-138	2+4 PR(30, 6)	31	5	2043.76190	2043.76156	34
2+4 RR(32, 6)	33	7	2042.65861	2042.65839	22	2+4 PR(24,18)	25	17	2043.76190	2043.76209	-19
2+4 RR(41,33)	42	34	2042.67477	2042.67503	-26	2+4 RR(41,18)	42	19	2043.76190	2043.76272	-81
2+4 RR(40,27)	41	28	2042.68274	2042.68273	0	2+4 RR(44,27)	45	28	2043.77718	2043.77736	-18
2+4 RR(41,39)	42	40	2042.68274	2042.68417	-143	2+4 RR(36, 6)	37	7	2043.81933	2043.81895	38
2+4 RR(36,15)	37	16	2042.68971	2042.68941	30	2+4 RR(40,15)	41	16	2043.81933	2043.81989	-56
2+4 PR(25, 9)	26	8	2042.69726	2042.69767	-41	2+4 RR(45,30)	46	31	2043.86967	2043.86964	2
2+4 PR(28, 3)	29	2	2042.72548	2042.72556	-7	225 RR(45,42)	46	43	2043.88280	2043.88431	-151
2+4 RR(35,12)	36	13	2042.76013	2042.76010	3	2+4 RR(39,12)	40	13	2043.89862	2043.89861	0
2+4 RR(31, 3)	32	4	2042.77161	2042.77145	15	2+4 PR(29, 9)	30	8	2043.90837	2043.90839	-3
2+4 RR(41,30)	42	31	2042.78523	2042.78534	-11	2+4 PR(32, 3)	33	2	2043.91507	2043.91538	-31
2+4 PR(24,12)	25	11	2042.84197	2042.84228	-31	2+4 RR(35, 3)	36	4	2043.93971	2043.93966	5
2+4 RR(34, 9)	35	10	2042.84883	2042.84857	26	2+4 RR(46,36)	47	37	2043.97916	2043.97908	8
2+4 PR(27, 6)	28	5	2042.86111	2042.86135	-24	2+4 RR(38, 9)	39	10	2043.99496	2043.99493	3
2+4 RR(30, 0)	31	1	2042.87982	2042.87959	22	2+4 RR(43,21)	44	22	2044.00615	2044.00615	-1
2+4 RR(39,21)	40	22	2042.89965	2042.89970	-4	2+4 RR(44,24)	45	25	2044.00615	2044.00619	-4
2+4 RR(40,24)	41	25	2042.90929	2042.90891	38	2+4 RR(46,39)	47	40	2044.01984	2044.01888	95
2+4 RR(42,36)	43	37	2042.90929	2042.91020	-91	2+4 RR(46,33)	47	34	2044.01984	2044.02116	-132
2+4 RR(38,18)	39	19	2042.92371	2042.92372	0	2+4 RR(42,18)	43	19	2044.03878	2044.03890	-12
2+4 RR(42,33)	43	34	2042.94799	2042.94787	12	2+4 RR(45,27)	46	28	2044.04663	2044.04659	4
2+4 RR(33, 6)	34	7	2042.95253	2042.95112	141	2+4 RR(34, 0)	35	1	2044.05163	2044.05122	41
2+4 RR(42,39)	43	40	2042.95253	2042.95482	-229	2+4 PR(31, 6)	32	5	2044.05856	2044.05823	33
2+4 RR(41,27)	42	28	2042.95919	2042.95905	14	2+4 PR(28,12)	29	11	2044.05856	2044.05998	-142
2+4 RR(37,15)	38	16	2042.97483	2042.97463	20	2+4 PR(25,18)	26	17	2044.06902	2044.06912	-10
2+4 PR(23,15)	24	14	2042.99059	2042.99091	-32	2+4 RR(41,15)	42	16	2044.09840	2044.09817	23
2+4 PR(26, 9)	27	8	2043.00251	2043.00290	-39	225 RR(45,45)	46	46	2044.09840W	2044.10186	-346
2+4 PR(29, 3)	30	2	2043.02575	2043.02557	18	2+4 RR(37, 6)	38	7	2044.10494	2044.10477	17
2+4 RR(36,12)	37	13	2043.04749	2043.04732	17	2+4 RR(46,30)	47	31	2044.13622	2044.13625	-3
2+4 RR(42,30)	43	31	2043.05907	2043.05909	-2	225 RR(46,42)	47	43	2044.14516	2044.14626	-110
2+4 RR(32, 3)	33	4	2043.06616	2043.06608	8	2+4 RR(40,12)	41	13	2044.17886	2044.17892	-6
225 RR(42,42)	43	43	2043.08511	2043.08719	-208	2+4 PR(30, 9)	31	8	2044.20773	2044.20682	91
2+4 RR(35, 9)	36	10	2043.13796	2043.13774	22	2+4 PR(33, 3)	34	2	2044.20773	2044.20858	-85
2+4 PR(25,12)	26	11	2043.14911	2043.14925	-14	2+4 PR(27,15)	28	14	2044.21544	2044.21554	-10
2+4 PR(28, 6)	29	5	2043.16315	2043.16312	3	2+4 RR(36, 3)	37	4	2044.22744	2044.22742	2
2+4 RR(31, 0)	32	1	2043.17832W	2043.17511	321	2+4 RR(47,36)	48	37	2044.24191	2044.24174	17
2+4 RR(40,21)	41	22	2043.17832	2043.17894	-62	2+4 RR(45,24)	46	25	2044.27742	2044.27610	131
2+4 RR(43,36)	44	37	2043.17832	2043.18016	-185	2+4 RR(39, 9)	40	10	2044.27742	2044.27721	20
2+4 RR(41,24)	42	25	2043.18604	2043.18587	17	2+4 RR(44,21)	45	22	2044.27742	2044.27839	-97
2+4 RR(39,18)	40	19	2043.20511	2043.20513	-2	2+4 RR(47,39)	48	40	2044.27742	2044.28028	-286
2+4 RR(43,33)	44	34	2043.21923	2043.21890	33	2+4 RR(47,33)	48	34	2044.28519	2044.28497	22
2+4 RR(43,39)	44	40	2043.22338	2043.22361	-23	2+4 RR(43,18)	44	19	2044.31366	2044.31334	33
2+4 RR(42,27)	43	28	2043.23351	2043.23359	-9	2+4 RR(46,27)	47	28	2044.31366	2044.31404	-38
2+4 RR(34, 6)	35	7	2043.24211	2043.24213	-1	2+4 RR(35, 0)	36	1	2044.33977	2044.33978	0
2+4 RR(38,15)	39	16	2043.25819	2043.25812	8	2+4 PR(32, 6)	33	5	2044.35300	2044.35320	-20
2+4 PR(24,15)	25	14	2043.29927	2043.29961	-35	2+4 PR(29,12)	30	11	2044.35972	2044.36016	-43
2+4 PR(27, 9)	28	8	2043.30617	2043.30643	-26	225 RR(46,45)	47	46	2044.35972	2044.36254	-282
2+4 PR(30, 3)	31	2	2043.32392	2043.32388	4	2+4 PR(26,18)	27	17	2044.37461	2044.37446	15
2+4 RR(43,30)	44	31	2043.33194	2043.33106	87	2+4 RR(42,15)	43	16	2044.37461	2044.37471	-10
2+4 RR(37,12)	38	13	2043.33194	2043.33281	-88	2+4 RR(38, 6)	39	7	2044.38889	2044.38886	3
225 RR(43,42)	44	43	2043.35310	2043.35478	-167	2+4 RR(47,30)	48	31	2044.40167	2044.40108	59
2+4 RR(33, 3)	34	4	2043.35931	2043.35899	32	225 RR(47,42)	48	43	2044.40599	2044.40634	-35
2+4 RR(36, 9)	37	10	2043.42532	2043.42519	13	2+4 RR(41,12)	42	13	2044.45743	2044.45750	-7
2+4 RR(44,36)	45	37	2043.44821	2043.44830	-8	2+4 PR(34, 3)	35	2	2044.50189	2044.50008	182
2+4 RR(41,21)	42	22	2043.45611	2043.45643	-32	2+4 RR(48,36)	49	37	2044.50189	2044.50257	-68
2+4 RR(42,24)	43	25	2043.46177	2043.46107	70	2+4 PR(31, 9)	32	8	2044.50189	2044.50355	-166
2+4 PR(29, 6)	30	5	2043.46917	2043.46319	-142	2+4 RR(37, 3)	38	4	2044.51364	2044.51364	18
2+4 RR(32, 0)	33	1	2043.46612	2043.46889	23	2+4 RR(48,39)	49	40	2044.53956	2044.53983	-26
2+4 RR(40,18)	41	19	2043.48773	2043.48479	293	2+4 RR(46,24)	47	25	2044.54711	2044.54426	285
2+4 RR(44,33)	45	34	2043.48773	2043.48813	-40	2+4 RR(48,33)	49	34	2044.54711	2044.54698	13
2+4 RR(44,39)	45	40	2043.48773	2043.49055	-283	2+4 RR(45,21)	46	22	2044.54711	2044.54888	-176
2+4 RR(43,27)	44	28	2043.50628	2043.50637	-8	2+4 RR(40, 9)	41	10	2044.55766	2044.55817	-51
2+4 RR(35, 6)	36	7	2043.53138	2043.53141	-2	2+4 RR(47,27)	48	28	2044.57973	2044.57973	0
2+4 RR(39,15)	40	16	2043.53981	2043.53987	-6	2+4 RR(44,18)	45	19	2044.58602	2044.58603	-1
2+4 RR(44,30)	45	31	2043.60123	2043.60125	-1	225 RR(47,45)	48	46	2044.61871	2044.62132	-261
2+4 PR(25,15)	26	14	2043.60763	2043.60662	101	2+4 RR(36, 0)	37	1	2044.62677	2044.62659	18
2+4 PR(28, 9)	29	8	2043.60763	2043.60826	-63	2+4 PR(33, 6)	34	5	2044.64807	2044.64646	161
2+4 RR(38,12)	39	13	2043.61814	2043.61658	156	2+4 RR(43,15)	44	16	2044.64807	2044.64952	-145
225 RR(44,42)	45	43	2043.61814	2043.62048	-234	2+4 PR(30,12)	31	11	2044.65748	2044.65864	-116
2+4 PR(31, 3)	32	2	2043.61814	2043.62048	-235	2+4 RR(48,30)	49	31	2044.66411	2044.66412	0
2+4 RR(34, 3)	35	4	2043.65026	2043.65018	8	225 RR(48,42)	49	43	2044.66411	2044.66455	-44
2+4 RR(37, 9)	38	10	2043.71254	2043.71092	162	2+4 RR(39, 6)	40	7	2044.67108	2044.67121	-14
2+4 RR(45,36)	46	37	2043.71254	2043.71460	-206	2+4 PR(27,18)	28	17	2044.67805	2044.67810	-5
2+4 RR(42,21)	43	22	2043.73310	2043.73216	93	2+4 RR(42,12)	43	13	2044.73424	2044.73434	-10
2+4 RR(43,24)	44	25	2043.73310	2043.73451	-141	2+4 RR(49,36)	50	37	2044.76218	2044.76159	59
2+4 RR(45,33)	46	34	2043.75569	2043.75554	14	2+4 PR(35, 3)	36	2	2044.78947	2044.78986	-40

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RR(49,39)	50 40	2044.79780	2044.79753	27	2+4 RR(47,15)	48 16	2045.73111	2045.73141	-30
2+4 RR(38, 3)	39 4	2044.79780	2044.79779	0	2+4 PR(29,21)	30 20	2045.74653	2045.74747	-95
2+4 PR(32, 9)	33 8	2044.79780	2044.79858	-78	2+4 RR(40, 0)	41 1	2045.75657	2045.75642	15
2+4 RR(49,33)	50 34	2044.80894	2044.80719	175	2+4 RR(53,36)	54 37	2045.78191	2045.77946	245
2+4 RR(47,24)	48 25	2044.80894	2044.81066	-172	2+4 RR(43, 6)	44 7	2045.78191	2045.78327	-136
2+4 RR(46,21)	47 22	2044.81742	2044.81761	-19	2+4 PR(37, 6)	38 5	2045.80224	2045.80246	-22
2+4 PR(29,15)	30 14	2044.81742	2044.81768	-26	2+4 RR(53,39)	54 40	2045.81079	2045.80993	86
2+4 RR(41, 9)	42 10	2044.83663	2044.83662	1	2+4 RR(46,12)	47 13	2045.82435	2045.82444	-9
2+4 RR(48,27)	49 28	2044.84357	2044.84364	-7	2+4 RR(53,33)	54 34	2045.83086	2045.83005	81
2+4 RR(45,18)	46 19	2044.85677	2044.85699	-22	2+4 PR(34,12)	35 11	2045.83626	2045.83556	70
225 RR(48,45)	49 46	2044.87586	2044.87820	-235	2+4 RR(51,24)	52 25	2045.85839	2045.85867	-29
2+4 RR(37, 0)	38 1	2044.91174	2044.91166	8	2+4 RR(50,21)	51 22	2045.87492	2045.87507	-15
225 RR(49,42)	50 43	2044.92275	2044.92089	187	2+4 PR(31,18)	32 17	2045.87492	2045.87573	-81
2+4 RR(44,15)	45 16	2044.92275	2044.92260	16	2+4 RR(52,27)	53 28	2045.88189	2045.88161	29
2+4 RR(49,30)	50 31	2044.92275	2044.92537	-262	225 RR(52,45)	53 46	2045.88639	2045.88677	-38
2+4 PR(34, 6)	35 5	2044.93794	2044.93801	-8	2+4 RR(42, 3)	43 4	2045.91790	2045.91793	-3
2+4 RR(40, 6)	41 7	2044.95212	2044.95183	29	2+4 PR(28,24)	29 23	2045.91790	2045.91841	-51
2+4 PR(28,18)	29 17	2044.97962	2044.98005	-44	2+4 RR(49,18)	50 19	2045.92354	2045.92339	15
2+4 RR(43,12)	44 13	2045.00936	2045.00946	-10	225 RR(53,42)	54 43	2045.92951	2045.92756	195
2+4 RR(50,36)	51 37	2045.01924	2045.01878	46	2+4 PR(39, 3)	40 2	2045.93373	2045.93197	176
2+4 RR(50,39)	51 40	2045.05383	2045.05339	44	2+4 RR(45, 9)	46 10	2045.93373	2045.93477	-104
2+4 RR(50,33)	51 34	2045.06597	2045.06560	37	2+4 RR(53,30)	54 31	2045.95274	2045.95258	16
2+4 RR(48,24)	49 25	2045.07774	2045.07530	244	2+4 PR(36, 9)	37 8	2045.96129	2045.96166	-37
2+4 PR(36, 3)	37 2	2045.07774	2045.07795	-21	2+4 RR(48,15)	49 16	2045.99746	2045.99754	-8
2+4 RR(39, 3)	40 4	2045.07774	2045.08040	-266	2+4 PR(33,15)	34 14	2046.00268	2046.00158	109
2+4 RR(47,21)	48 22	2045.08495	2045.08460	34	2+4 RR(54,36)	55 37	2046.03318W	2046.02939	379
2+4 PR(33, 9)	34 8	2045.09164	2045.09190	-26	2+4 RR(41, 0)	42 1	2046.03318	2046.03452	-134
2+4 RR(49,27)	50 28	2045.10574	2045.10579	-4	2+4 PR(30,21)	31 20	2046.04599	2046.04606	-7
2+4 RR(42, 9)	43 10	2045.11406	2045.11374	32	2+4 RR(44, 6)	45 7	2046.05733	2046.05693	40
2+4 PR(30,15)	31 14	2045.11406	2045.11620	-215	2+4 RR(54,39)	55 40	2046.05733	2046.05843	-110
2+4 RR(46,18)	47 19	2045.12601	2045.12620	-19	2+4 RR(54,33)	55 34	2046.08204	2046.08128	76
225 RR(49,45)	50 46	2045.13108	2045.13319	-210	2+4 PR(38, 6)	39 5	2046.08733	2046.08720	14
2+4 PR(27,21)	28 20	2045.14416	2045.14522	-106	2+4 RR(47,12)	48 13	2046.09267	2046.09263	4
225 RR(50,42)	51 43	2045.17368	2045.17535	-168	2+4 RR(52,24)	53 25	2046.11589	2046.11629	-40
2+4 RR(50,30)	51 31	2045.18493	2045.18485	8	2+4 PR(35,12)	36 11	2046.12525	2046.12554	-29
2+4 RR(45,15)	46 16	2045.19427	2045.19393	33	225 RR(53,45)	54 46	2046.13488	2046.13418	70
2+4 RR(38, 0)	39 1	2045.19427	2045.19499	-72	2+4 RR(51,21)	52 22	2046.13488	2046.13506	-18
2+4 PR(35, 6)	36 5	2045.22932	2045.22787	145	2+4 RR(53,27)	54 28	2046.13488	2046.13668	-180
2+4 RR(41, 6)	42 7	2045.22932	2045.23072	-139	2+4 PR(32,18)	33 17	2046.17022	2046.17089	-67
2+4 PR(32,12)	33 11	2045.25017	2045.25050	-33	225 RR(54,42)	55 43	2046.17615	2046.17457	157
2+4 RR(51,36)	52 37	2045.27479	2045.27416	63	2+4 RR(50,18)	51 19	2046.18527	2046.18563	-37
2+4 RR(44,12)	45 13	2045.28254	2045.28285	-31	2+4 RR(43, 3)	44 4	2046.19356	2046.19367	-11
2+4 RR(51,39)	52 40	2045.30799	2045.30741	59	2+4 RR(54,30)	55 31	2046.20500	2046.20494	6
2+4 RR(51,33)	52 34	2045.32261	2045.32221	39	2+4 RR(46, 9)	47 10	2046.20500	2046.20501	-1
2+4 RR(49,24)	50 25	2045.33812	2045.33818	-6	2+4 PR(40, 3)	41 2	2046.21294	2046.21324	-30
2+4 RR(48,21)	49 22	2045.34963	2045.34984	-21	2+4 PR(37, 9)	38 8	2046.24794	2046.24818	-23
2+4 RR(40, 3)	41 4	2045.36330	2045.36130	200	2+4 RR(49,15)	50 16	2046.26154	2046.26194	-40
2+4 PR(37, 3)	38 2	2045.36330	2045.36433	-103	2+4 RR(55,36)	56 37	2046.27850	2046.27751	98
2+4 RR(50,27)	51 28	2045.36330	2045.36616	-287	2+4 PR(34,15)	35 14	2046.29314	2046.29331	-17
2+4 PR(34, 9)	35 8	2045.38376	2045.38353	24	2+4 RR(55,39)	56 40	2046.30655	2046.30510	145
225 RR(50,45)	51 46	2045.38376	2045.38627	-251	2+4 RR(42, 0)	43 1	2046.31102	2046.31088	13
2+4 RR(43, 9)	44 10	2045.38984	2045.38914	71	2+4 RR(45, 6)	46 7	2046.32940	2046.32885	54
2+4 RR(47,18)	48 19	2045.39414	2045.39367	47	2+4 RR(55,33)	56 34	2046.32940	2046.33071	-131
2+4 PR(31,15)	32 14	2045.41250	2045.41303	-53	2+4 PR(31,21)	32 20	2046.34297	2046.34295	3
225 RR(51,42)	52 43	2045.42727	2045.42795	-69	2+4 RR(48,12)	49 13	2046.35906	2046.35910	-4
2+4 RR(51,30)	52 31	2045.44283	2045.44254	29	2+4 PR(39, 6)	40 5	2046.37086	2046.37023	63
2+4 RR(46,15)	47 16	2045.46334	2045.46354	-20	2+4 RR(53,24)	54 25	2046.37086	2046.37214	-128
2+4 RR(39, 0)	40 1	2045.47659	2045.47658	1	225 RR(54,45)	55 46	2046.37890	2046.37970	-80
2+4 RR(42, 6)	43 7	2045.50761	2045.50786	-25	2+4 RR(54,27)	55 28	2046.39133	2046.38999	134
2+4 PR(36, 6)	37 5	2045.51567	2045.51602	-35	2+4 RR(52,21)	53 22	2046.39133	2046.39331	-197
2+4 RR(52,36)	53 37	2045.52844	2045.52772	72	2+4 PR(36,12)	37 11	2046.41334	2046.41382	-48
2+4 PR(33,12)	34 11	2045.54347	2045.54388	-42	225 RR(55,42)	56 43	2046.42182	2046.41972	210
2+4 RR(45,12)	46 13	2045.55449	2045.55451	-2	2+4 RR(51,18)	52 19	2046.44579	2046.44614	-35
2+4 RR(52,39)	53 40	2045.56062	2045.55959	103	2+4 RR(55,30)	56 31	2046.45600	2046.45552	48
2+4 RR(52,33)	53 34	2045.57771	2045.57703	68	2+4 RR(44, 3)	45 4	2046.46748	2046.46770	-22
2+4 PR(30,18)	31 17	2045.57771	2045.57886	-115	2+4 RR(47, 9)	48 10	2046.47364	2046.47353	11
2+4 RR(50,24)	51 25	2045.59903	2045.59931	-28	2+4 PR(41, 3)	42 2	2046.49256	2046.49280	-24
2+4 RR(49,21)	50 22	2045.61305	2045.61333	-28	2+4 PR(30,24)	31 23	2046.51656	2046.51731	-75
2+4 RR(51,27)	52 28	2045.62477	2045.62477	1	2+4 RR(56,36)	57 37	2046.52453	2046.52383	71
225 RR(51,45)	52 46	2045.63572	2045.63747	-174	2+4 RR(50,15)	51 16	2046.52453	2046.52460	-6
2+4 RR(41, 3)	42 4	2045.64047	2045.64047	0	2+4 PR(38, 9)	39 8	2046.53263	2046.53299	-35
2+4 PR(38, 3)	39 2	2045.64861	2045.64900	-39	2+4 RR(56,39)	57 40	2046.54932	2046.54995	-62
2+4 RR(48,18)	49 19	2045.66085	2045.65940	145	2+4 RR(56,33)	57 34	2046.57960	2046.57835	125
2+4 RR(44, 9)	45 10	2045.66085	2045.66282	-197	2+4 PR(35,15)	36 14	2046.58502	2046.58334	168
2+4 PR(35, 9)	36 8	2045.67356	2045.67345	11	2+4 RR(43, 0)	44 1	2046.58502	2046.58550	-48
225 RR(52,42)	53 43	2045.67894	2045.67869	25	2+4 RR(46, 6)	47 7	2046.59864	2046.59903	-39
2+4 RR(52,30)	53 31	2045.69862	2045.69845	17	225 RR(55,45)	56 46	2046.62399	2046.62334	65
2+4 PR(32,15)	33 14	2045.70802	2045.70816	-14	2+4 RR(49,12)	50 13	2046.62399	2046.62384	14

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5	2+4 RR(54,24)	55 25	2046.62399	2046.62624	-225	2+4 PR(43, 6)	44 5	2047.48514	2047.48531	-17
6	2+4 RR(55,27)	56 28	2046.64112	2046.64154	-42	2+4 RR(60,36)	61 37	2047.49259	2047.49102	157
7	2+4 RR(53,21)	54 22	2046.65021	2046.64981	40	2+4 RR(60,39)	61 40	2047.51361	2047.51104	257
8	2+4 PR(40, 6)	41 5	2046.65021	2046.65156	-135	2+4 PR(35,21)	36 20	2047.51361	2047.51354	8
9	225 RR(56,42)	57 43	2046.66473	2046.66302	171	225 RR(56,51)	57 52	2047.51361W	2047.52263	-901
10	2+4 PR(37,12)	38 11	2046.69980	2046.70039	-59	2+4 RR(51, 9)	52 10	2047.53019	2047.53045	-26
11	2+4 RR(56,30)	57 31	2046.70454	2046.70432	22	2+4 RR(48, 3)	49 4	2047.54829	2047.54661	168
12	2+4 RR(52,18)	53 19	2046.70454	2046.70490	-37	2+4 PR(40,12)	41 11	2047.54829	2047.54990	-161
13	2+4 RR(45, 3)	46 4	2046.74007	2046.74000	6	2+4 RR(60,33)	61 34	2047.54829	2047.55106	-276
14	2+4 RR(48, 9)	49 10	2046.74007	2046.74034	-27	2+4 RR(54,15)	55 16	2047.55776	2047.55790	-14
15	2+4 PR(34,18)	35 17	2046.75566	2046.75612	-47	225 RR(59,45)	60 46	2047.57941	2047.57908	32
16	2+4 RR(57,36)	58 37	2046.76992	2046.76833	159	2+4 PR(45, 3)	46 2	2047.59375	2047.59399	-24
17	2+4 PR(42, 3)	43 2	2046.76992	2046.77065	-73	225 RR(60,42)	61 43	2047.61996	2047.61768	228
18	2+4 RR(51,15)	52 16	2046.78502	2046.78553	-50	2+4 PR(37,18)	38 17	2047.61996	2047.62123	-127
19	2+4 RR(57,39)	58 40	2046.79336	2046.79296	40	2+4 RR(58,24)	59 25	2047.62555	2047.62511	44
20	2+4 PR(31,24)	32 23	2046.81544	2046.81422	121	225 RR(58,48)	59 49	2047.62555	2047.62854	-299
21	2+4 PR(39, 9)	40 8	2046.81544	2046.81609	-66	2+4 RR(59,27)	60 28	2047.63068	2047.63009	59
22	2+4 RR(57,33)	58 34	2046.82486	2046.82421	65	2+4 PR(42, 9)	43 8	2047.65617	2047.65518	99
23	2+4 RR(44, 0)	45 1	2046.85847	2046.85837	10	2+4 RR(57,21)	58 22	2047.65617	2047.65834	-217
24	225 RR(56,45)	57 46	2046.86648	2046.86510	139	2+4 RR(50, 6)	51 7	2047.66507	2047.66223	284
25	2+4 RR(47, 6)	48 7	2046.86648	2046.86745	-97	2+4 RR(53,12)	54 13	2047.66507	2047.66552	-45
26	2+4 PR(36,15)	37 14	2046.87222	2046.87167	54	2+4 RR(47, 0)	48 1	2047.66507	2047.66653	-146
27	2+4 RR(55,24)	56 25	2046.87834	2046.87859	-25	2+4 RR(60,30)	61 31	2047.68208	2047.68180	27
28	2+4 RR(50,12)	51 13	2046.88666	2046.88686	-20	2+4 PR(34,24)	35 23	2047.69410	2047.69478	-68
29	2+4 RR(56,27)	57 28	2046.89197	2046.89132	65	2+4 RR(56,18)	57 19	2047.72217	2047.72256	-39
30	225 RR(57,42)	58 43	2046.90451	2046.90446	5	2+4 PR(39,15)	40 14	2047.72831	2047.72645	186
31	2+4 RR(54,21)	55 22	2046.90451	2046.90456	-5	2+4 RR(61,36)	62 37	2047.72831	2047.72832	-1
32	225 RR(55,48)	56 49	2046.91071	2046.91339	-268	2+4 RR(61,39)	62 40	2047.74897	2047.74676	221
33	2+4 PR(41, 6)	42 5	2046.93100	2046.93118	-18	225 RR(57,51)	58 52	2047.75971	2047.75964	6
34	2+4 PR(33,21)	34 20	2046.93100	2046.93164	-63	2+4 PR(44, 6)	45 5	2047.75971	2047.75981	-11
35	2+4 RR(57,30)	58 31	2046.95143	2046.95135	8	2+4 RR(61,33)	62 34	2047.79026	2047.78977	49
36	2+4 RR(53,18)	54 19	2046.96154	2046.96193	-39	2+4 RR(52, 9)	53 10	2047.79026	2047.79039	-13
37	2+4 PR(38,12)	39 11	2046.98479	2046.98526	-47	2+4 PR(36,21)	37 20	2047.80159	2047.80194	-35
38	2+4 PR(30,27)	31 26	2046.99133	2046.99223	-90	2+4 RR(55,15)	56 16	2047.81203	2047.81189	14
39	2+4 RR(49, 9)	50 10	2047.00542	2047.00542	0	2+4 RR(49, 3)	50 4	2047.81203	2047.81204	-1
40	2+4 RR(46, 3)	47 4	2047.01125	2047.01059	66	225 RR(60,45)	61 46	2047.81203	2047.81333	-130
41	2+4 RR(58,36)	59 37	2047.01125	2047.01103	23	2+4 PR(41,12)	42 11	2047.82937	2047.82966	-30
42	2+4 RR(58,39)	59 40	2047.03553	2047.03414	139	225 RR(61,42)	62 43	2047.85372	2047.85173	199
43	2+4 RR(52,15)	53 16	2047.04529	2047.04472	57	225 RR(59,48)	60 49	2047.86364	2047.86311	53
44	2+4 PR(35,18)	36 17	2047.04529	2047.04619	-90	2+4 PR(46, 3)	47 2	2047.86364	2047.86502	-138
45	2+4 PR(43, 3)	44 2	2047.04529	2047.04680	-151	2+4 RR(59,24)	60 25	2047.87120	2047.87045	75
46	2+4 RR(58,33)	59 34	2047.06897	2047.06828	69	2+4 RR(60,27)	61 28	2047.87120	2047.87283	-163
47	2+4 PR(40, 9)	41 8	2047.09702	2047.09749	-48	2+4 RR(58,21)	59 22	2047.90562	2047.90611	-49
48	225 RR(57,45)	58 46	2047.10517	2047.10497	21	2+4 PR(38,18)	39 17	2047.90562	2047.90620	-59
49	2+4 RR(56,24)	57 25	2047.12928	2047.12918	9	2+4 RR(54,12)	55 13	2047.92201	2047.92161	40
50	2+4 RR(45, 0)	46 1	2047.12928	2047.12950	-23	2+4 RR(61,30)	62 31	2047.92201	2047.92175	26
51	2+4 RR(48, 6)	49 7	2047.13460	2047.13413	47	2+4 RR(51, 6)	52 7	2047.92201	2047.92364	-163
52	2+4 RR(57,27)	58 28	2047.13970	2047.13934	37	2+4 PR(43, 9)	44 8	2047.93186	2047.93147	40
53	225 RR(58,42)	59 43	2047.14721W	2047.14405	316	2+4 RR(48, 0)	49 1	2047.93186	2047.93242	-56
54	2+4 RR(51,12)	52 13	2047.14721	2047.14814	-93	2+4 RR(62,36)	63 37	2047.96518	2047.96381	137
55	2+4 RR(55,21)	56 22	2047.15738	2047.15756	-18	2+4 RR(57,18)	58 19	2047.97205	2047.97263	-58
56	2+4 PR(37,15)	38 14	2047.15738	2047.15830	-92	2+4 RR(62,39)	63 40	2047.98347	2047.98066	282
57	2+4 RR(58,30)	59 31	2047.19703	2047.19660	42	2+4 PR(35,24)	36 23	2047.98347	2047.98491	-143
58	2+4 PR(42, 6)	43 5	2047.20892	2047.20910	-18	2+4 PR(40,15)	41 14	2048.00752	2048.00797	-46
59	2+4 RR(54,18)	55 19	2047.21658	2047.21721	-64	2+4 RR(62,33)	63 34	2048.02732	2048.02671	61
60	2+4 PR(34,21)	35 20	2047.22313	2047.22343	-31	2+4 PR(45, 6)	46 5	2048.03254	2048.03261	-7
	2+4 RR(59,36)	60 37	2047.25308	2047.25192	116	225 RR(61,45)	62 46	2048.04785	2048.04570	215
	2+4 PR(39,12)	40 11	2047.26832	2047.26843	-11	2+4 RR(53, 9)	54 10	2048.04785	2048.04862	-77
	2+4 RR(50, 9)	51 10	2047.26832	2047.26879	-47	2+4 RR(56,15)	57 16	2048.06355	2048.06415	-60
	2+4 RR(59,39)	60 40	2047.27777W	2047.27350	427	2+4 RR(50, 3)	51 4	2048.07564	2048.07575	-11
	2+4 RR(47, 3)	48 4	2047.27777	2047.27946	-169	225 RR(62,42)	63 43	2048.08702W	2048.08394	308
	2+4 RR(53,15)	54 16	2047.30179	2047.30218	-38	2+4 PR(37,21)	38 20	2048.08702	2048.08865	-163
	2+4 RR(59,33)	60 34	2047.31141	2047.31056	85	225 RR(60,48)	61 49	2048.09433	2048.09578	-146
	2+4 PR(44, 3)	45 2	2047.32098	2047.32125	-27	2+4 PR(42,12)	43 11	2048.10763	2048.10772	-10
	2+4 PR(36,18)	37 17	2047.33418	2047.33456	-38	2+4 RR(61,27)	62 28	2048.11361	2048.11381	-21
	225 RR(58,45)	59 46	2047.34295	2047.34296	-1	2+4 RR(60,24)	61 25	2048.11361	2048.11403	-43
	2+4 PR(41, 9)	42 8	2047.37718	2047.37719	-1	2+4 PR(47, 3)	48 2	2048.13422	2048.13435	-13
	2+4 RR(57,24)	58 25	2047.37718	2047.37802	-84	2+4 RR(59,21)	60 22	2048.15148	2048.15213	-65
	225 RR(59,42)	60 43	2047.38461	2047.38179	283	2+4 RR(62,30)	63 31	2048.15998	2048.15993	5
	2+4 RR(58,27)	59 28	2047.38461	2047.38559	-98	2+4 RR(55,12)	56 13	2048.17558	2048.17598	-40
	225 RR(57,48)	58 49	2047.39015	2047.39206	-191	2+4 RR(52, 6)	53 7	2048.18277	2048.18329	-52
	2+4 RR(46, 0)	47 1	2047.39880	2047.39889	-8	2+4 PR(39,18)	40 17	2048.18899	2048.18947	-48
	2+4 RR(49, 6)	50 7	2047.39880	2047.39905	-25	2+4 RR(49, 0)	50 1	2048.19703	2048.19658	45
	2+4 RR(52,12)	53 13	2047.40758	2047.40769	-11	2+4 RR(63,36)	64 37	2048.19703	2048.19752	-49
	2+4 RR(56,21)	57 22	2047.40758	2047.40882	-124	2+4 PR(44, 9)	45 8	2048.20584	2048.20605	-20
	2+4 RR(59,30)	60 31	2047.44136	2047.44009	127	2+4 RR(63,39)	64 40	2048.21510	2048.21275	235
	2+4 PR(38,15)	39 14	2047.44136	2047.44322	-187	2+4 RR(58,18)	59 19	2048.22105	2048.22096	9
	2+4 RR(55,18)	56 19	2047.47085	2047.47076	9	2+4 RR(63,33)	64 34	2048.26257	2048.26187	70

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(I)		(II)		(III)	(IV)	(V)	(I)		(II)	(III)	(IV)	(V)
2+4 PR(36,24)	37	23	2048.27265	2048.27334	-69		2+4 PR(37,27)	38	26	2049.03549	2049.03510	38
225 RR(62,45)	63	46	2048.27731	2048.27621	110		2+4 RR(60,15)	61	16	2049.05533	2049.05585	-53
2+4 PR(41,15)	42	14	2048.28763	2048.28779	-16		2+4 RR(57,9)	58	10	2049.06443	2049.06451	-8
2+4 PR(46,6)	47	5	2048.30424	2048.30370	53		2+4 RR(64,24)	65	25	2049.07033	2049.07090	-57
2+4 RR(54,9)	55	10	2048.30424	2048.30515	-91		2+4 RR(66,30)	67	31	2049.09503	2049.09502	1
225 RR(63,42)	64	43	2048.31476	2048.31431	45		2+4 PR(49,6)	50	5	2049.10682	2049.10674	8
2+4 RR(57,15)	58	16	2048.31476	2048.31467	9		2+4 RR(54,3)	55	4	2049.11522	2049.11338	184
225 RR(61,48)	62	49	2048.32532	2048.32656	-124		2+4 RR(67,36)	68	37	2049.11522	2049.11445	77
2+4 RR(51,3)	52	4	2048.33768	2048.33774	-6		2+4 PR(44,15)	45	14	2049.11522	2049.11704	-182
2+4 RR(62,27)	63	28	2048.35405	2048.35304	101		2+4 RR(63,21)	64	22	2049.11522W	2049.11881	-359
2+4 RR(61,24)	62	25	2048.35405	2048.35587	-182		2+4 RR(59,12)	60	13	2049.17590	2049.17618	-28
2+4 PR(38,21)	39	20	2048.37338	2048.37365	-27		2+4 RR(67,33)	68	34	2049.18376	2049.18477	-101
2+4 PR(43,12)	44	11	2048.38387	2048.38408	-21		2+4 PR(51,3)	52	2	2049.19523	2049.19463	60
2+4 RR(63,30)	64	31	2048.39606	2048.39634	-29		2+4 RR(62,18)	63	19	2049.19523	2049.19691	-168
2+4 PR(60,21)	61	22	2048.39606	2048.39642	-36		2+4 PR(46,12)	47	11	2049.20317	2049.20292	25
2+4 RR(48,3)	49	2	2048.40225	2048.40198	27		2+4 RR(56,6)	57	7	2049.20317	2049.20426	-109
2+4 RR(56,12)	57	13	2048.42902	2048.42862	40		2+4 PR(41,21)	42	20	2049.21888	2049.21848	40
2+4 RR(64,36)	65	37	2048.42902	2048.42943	-41		2+4 RR(53,0)	54	1	2049.23588	2049.23576	12
2+4 RR(53,6)	54	7	2048.44071	2048.44118	-47		2+4 PR(48,9)	49	8	2049.28745	2049.28731	14
2+4 RR(64,39)	65	40	2048.44071	2048.44302	-231		2+4 RR(66,27)	67	28	2049.29253	2049.29240	13
2+4 RR(50,0)	51	1	2048.45906	2048.45899	7		2+4 RR(61,15)	62	16	2049.29896	2049.29945	-49
2+4 PR(35,27)	36	26	2048.45906	2048.45990	-85		2+4 PR(43,18)	44	17	2049.30510	2049.30555	-45
2+4 RR(59,18)	60	19	2048.46710	2048.46755	-45		2+4 RR(65,24)	66	25	2049.30510	2049.30575	-65
2+4 PR(40,18)	41	17	2048.47122	2048.47104	18		2+4 RR(58,9)	59	10	2049.31412	2049.31424	-12
2+4 PR(45,9)	46	8	2048.47876	2048.47892	-17		2+4 RR(67,30)	68	31	2049.32355	2049.32439	-84
2+4 RR(64,33)	65	34	2048.49622	2048.49525	96		2+4 RR(68,36)	69	37	2049.34008	2049.33922	86
225 RR(63,45)	64	46	2048.50679	2048.50485	194		2+4 RR(64,21)	65	22	2049.35539	2049.35613	-74
225 RR(64,42)	65	43	2048.54497	2048.54285	212		2+4 RR(55,3)	56	4	2049.36943	2049.36848	96
225 RR(62,48)	63	49	2048.55419	2048.55544	-125		2+4 PR(50,6)	51	5	2049.36943	2049.37100	-157
2+4 RR(55,9)	56	10	2048.56064	2048.55997	67		2+4 PR(45,15)	46	14	2049.38999	2049.39005	-6
2+4 PR(37,24)	38	23	2048.56064	2048.56007	57		2+4 PR(40,24)	41	23	2049.41064	2049.41008	57
2+4 RR(58,15)	59	16	2048.56535	2048.56347	188		2+4 RR(68,33)	69	34	2049.41064	2049.41107	-43
2+4 PR(42,15)	43	14	2048.56535	2048.56591	-56		2+4 RR(60,12)	61	13	2049.42153	2049.42192	-39
2+4 PR(47,6)	48	5	2048.57285	2048.57309	-23		2+4 RR(63,18)	64	19	2049.43568	2049.43655	-88
2+4 RR(63,27)	64	28	2048.59004	2048.59051	-47		2+4 RR(57,6)	58	7	2049.45421	2049.45508	-86
2+4 RR(62,24)	63	25	2048.59709	2048.59596	113		2+4 PR(52,3)	53	2	2049.45421	2049.45544	-122
2+4 RR(52,3)	53	4	2048.59709	2048.59801	-92		2+4 PR(47,12)	48	11	2049.47242	2049.47246	-4
2+4 RR(64,30)	65	31	2048.63078	2048.63100	-22		2+4 RR(54,0)	55	1	2049.49137	2049.49119	18
2+4 RR(61,21)	62	22	2048.63797	2048.63896	-98		2+4 PR(42,21)	43	20	2049.49739	2049.49669	70
2+4 PR(34,30)	35	29	2048.64756	2048.64803	-47		2+4 PR(37,30)	38	29	2049.51304	2049.51341	-37
2+4 PR(39,21)	40	20	2048.65735	2048.65696	39		2+4 RR(67,27)	68	28	2049.52244	2049.52287	-43
2+4 PR(44,12)	45	11	2048.65735	2048.65873	-138		2+4 RR(66,24)	67	25	2049.53952	2049.53886	66
2+4 RR(65,36)	66	37	2048.65735	2048.65956	-221		2+4 RR(62,15)	63	16	2049.53952	2049.54131	-179
2+4 PR(49,3)	50	2	2048.66804	2048.66790	14		2+4 RR(68,30)	69	31	2049.55259	2049.55200	59
2+4 RR(65,39)	66	40	2048.67398	2048.67149	250		2+4 PR(49,9)	50	8	2049.55259	2049.55336	-77
2+4 RR(57,12)	58	13	2048.67933	2048.67954	-21		2+4 RR(59,9)	60	10	2049.56273	2049.56228	46
2+4 RR(54,6)	55	7	2048.69668	2048.69731	-63		2+4 PR(44,18)	45	17	2049.58087	2049.58031	56
2+4 RR(60,18)	61	19	2048.71145	2048.71241	-95		2+4 RR(65,21)	66	22	2049.59087	2049.59171	-84
2+4 RR(51,0)	52	1	2048.71972	2048.71966	7		2+4 PR(39,27)	40	26	2049.60384	2049.60351	33
2+4 RR(65,33)	66	34	2048.72747	2048.72686	61		2+4 RR(56,3)	57	4	2049.62197	2049.62185	13
225 RR(64,45)	65	46	2048.73376	2048.73163	212		2+4 PR(51,6)	52	5	2049.63399	2049.63356	43
2+4 PR(46,9)	47	8	2048.75004	2048.75009	-5		2+4 PR(46,15)	47	14	2049.66145	2049.66136	9
2+4 PR(41,18)	42	17	2048.75004	2048.75091	-87		2+4 RR(61,12)	62	13	2049.66631	2049.66593	39
225 RR(65,42)	66	43	2048.77220	2048.76955	265		2+4 RR(64,18)	65	19	2049.67317	2049.67446	-129
225 RR(63,48)	64	49	2048.78197	2048.78243	-45		2+4 PR(41,24)	42	23	2049.68946	2049.69002	-56
2+4 RR(59,15)	60	16	2048.81132	2048.81052	80		2+4 RR(58,6)	59	7	2049.70332	2049.70412	-79
2+4 RR(56,9)	57	10	2048.81132	2048.81309	-177		2+4 PR(53,3)	54	2	2049.71390	2049.71454	-64
2+4 RR(64,27)	65	28	2048.82552	2048.82623	-70		2+4 PR(48,12)	49	11	2049.74026	2049.74029	-3
2+4 RR(63,24)	64	25	2048.83348	2048.83430	-82		2+4 RR(55,0)	56	1	2049.74520	2049.74489	31
2+4 PR(48,6)	49	5	2048.84141	2048.84077	64		2+4 RR(68,27)	69	28	2049.75132	2049.75158	-26
2+4 PR(43,15)	44	14	2048.84141	2048.84233	-92		2+4 RR(67,24)	68	25	2049.76928	2049.77022	-94
2+4 RR(53,3)	54	4	2048.85641	2048.85656	-15		2+4 PR(43,21)	44	20	2049.77311	2049.77319	-8
2+4 RR(65,30)	66	31	2048.86370	2048.86389	-19		2+4 RR(69,30)	70	31	2049.77975	2049.77786	189
2+4 RR(62,21)	63	22	2048.87898	2048.87976	-78		2+4 RR(63,15)	64	16	2049.77975	2049.78145	-169
2+4 RR(66,39)	67	40	2048.90049	2048.89815	234		2+4 PR(38,30)	39	29	2049.79796	2049.79847	-51
2+4 RR(58,12)	59	13	2048.93041	2048.92872	168		2+4 RR(60,9)	61	10	2049.80842	2049.80864	-22
2+4 PR(45,12)	46	11	2048.93041	2048.93168	-127		2+4 PR(50,9)	51	8	2049.81763	2049.81771	-7
2+4 PR(50,3)	51	2	2048.93041	2048.93211	-171		2+4 RR(66,21)	67	22	2049.82452	2049.82555	-103
2+4 PR(35,30)	36	29	2048.93840	2048.93818	21		2+4 PR(45,18)	46	17	2049.85346	2049.85338	9
2+4 PR(40,21)	41	20	2048.93840	2048.93857	-17		2+4 RR(57,3)	58	4	2049.87365	2049.87348	17
2+4 RR(55,6)	56	7	2048.95176	2048.95167	9		2+4 PR(40,27)	41	26	2049.88496	2049.88517	-22
2+4 RR(61,18)	62	19	2048.95622	2048.95552	69		2+4 PR(52,6)	53	5	2049.89444	2049.89441	3
2+4 RR(66,33)	67	34	2048.95622	2048.95670	-48		2+4 RR(62,12)	63	13	2049.90855	2049.90821	34
2+4 RR(52,0)	53	1	2048.97832	2048.97858	-26		2+4 RR(65,18)	66	19	2049.90855	2049.91064	-209
225 RR(66,42)	67	43	2048.99695	2048.99442	253		2+4 PR(47,15)	48	14	2049.93116	2049.93096	21
225 RR(64,48)	65	49	2049.00754	2049.00753	1		2+4 RR(59,6)	60	7	2049.95065	2049.95138	-73
2+4 PR(47,9)	48	8	2049.01953	2049.01955	-2		2+4 PR(54,3)	55	2	2049.97012	2049.97194	-183
2+4 PR(42,18)	43	17	2049.02891	2049.02908	-18		2+4 RR(69,27)	70	28	2049.97771	2049.97855	-84

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)	
2+4 RR(56, 0)	57	1	2049.99752	2049.99684	68	2+4 RR(68, 15)	69	16	2050.95581	2050.95618	-37
2+4 RR(68, 24)	69	25	2049.99752	2049.99985	-233	2+4 RR(71, 21)	72	22	2050.96703	2050.96871	-168
2+4 PR(49, 12)	50	11	2050.00630	2050.00642	-11	2+4 PR(58, 3)	59	2	2050.98685	2050.98453	233
2+4 RR(64, 15)	65	16	2050.01960	2050.01985	-26	2+4 RR(60, 0)	61	1	2050.98685	2050.98721	-36
2+4 PR(44, 21)	45	20	2050.04786	2050.04800	-14	2+4 PR(51, 15)	52	14	2050.99308	2050.99232	76
2+4 RR(61, 9)	62	10	2050.05457	2050.05332	126	2+4 RR(65, 9)	66	10	2051.01559	2051.01544	15
2+4 RR(67, 21)	68	22	2050.05457W	2050.05766	-308	2+4 PR(53, 12)	54	11	2051.05396	2051.05387	10
2+4 PR(51, 9)	52	8	2050.08030	2050.08035	-5	2+4 PR(46, 24)	47	23	2051.06439	2051.06422	17
2+4 PR(39, 30)	40	29	2050.08030	2050.08185	-154	2+4 RR(70, 18)	71	19	2051.06439	2051.06554	-115
2+4 RR(58, 3)	59	4	2050.12387	2050.12338	48	2+4 RR(67, 12)	68	13	2051.09390	2051.09379	11
2+4 PR(46, 18)	47	17	2050.12387	2050.12474	-87	2+4 RR(75, 30)	76	31	2051.09390	2051.09629	-239
2+4 RR(66, 18)	67	19	2050.14367	2050.14509	-141	2+4 RR(62, 3)	63	4	2051.10583	2051.10554	29
2+4 RR(63, 12)	64	13	2050.14833	2050.14877	-44	2+4 PR(55, 9)	56	8	2051.11416	2051.11383	32
2+4 PR(53, 6)	54	5	2050.15341	2050.15356	-15	2+4 RR(73, 24)	74	25	2051.12050	2051.12187	-137
2+4 PR(41, 27)	42	26	2050.16483	2050.16514	-31	2+4 PR(41, 33)	42	32	2051.12573	2051.12481	92
2+4 RR(60, 6)	61	7	2050.19717	2050.19686	32	2+4 PR(48, 21)	49	20	2051.13062	2051.13022	40
2+4 PR(48, 15)	49	14	2050.19717	2050.19886	-168	2+4 RR(64, 6)	65	7	2051.15916	2051.16090	-174
2+4 RR(70, 27)	71	28	2050.20381	2050.20377	4	2+4 PR(57, 6)	58	5	2051.17331	2051.17307	23
2+4 RR(71, 30)	72	31	2050.22508	2050.22433	75	2+4 RR(69, 15)	70	16	2051.18522	2051.18594	-72
2+4 PR(55, 3)	56	2	2050.22508	2050.22764	-256	2+4 RR(72, 21)	73	22	2051.19197	2051.19214	-17
2+4 RR(69, 24)	70	25	2050.22508	2050.22773	-264	2+4 PR(50, 18)	51	17	2051.19197	2051.19315	-118
2+4 PR(43, 24)	44	23	2050.24606	2050.24480	126	2+4 RR(61, 0)	62	1	2051.23092	2051.23045	47
2+4 RR(57, 0)	58	1	2050.24606	2050.24704	-98	2+4 RR(66, 9)	67	10	2051.25290	2051.25186	104
2+4 RR(65, 15)	66	16	2050.25562	2050.25653	-91	2+4 PR(52, 15)	53	14	2051.25290	2051.25340	-51
2+4 PR(50, 12)	51	11	2050.27060	2050.27084	-24	2+4 PR(45, 27)	46	26	2051.26798	2051.26800	-2
2+4 RR(68, 21)	69	22	2050.28666	2050.28802	-136	2+4 RR(71, 18)	72	19	2051.29004	2051.29133	-128
2+4 RR(62, 9)	63	10	2050.29665	2050.29633	32	2+4 RR(75, 27)	76	28	2051.30190	2051.30376	-186
2+4 PR(45, 21)	46	20	2050.32052	2050.32111	-59	2+4 PR(54, 12)	55	11	2051.31136	2051.31147	-11
2+4 PR(52, 9)	53	8	2050.34128	2050.34128	0	2+4 RR(68, 12)	69	13	2051.32541	2051.32574	-33
2+4 PR(40, 30)	41	29	2050.36322	2050.36352	-30	2+4 PR(47, 24)	48	23	2051.33311	2051.33396	-85
2+4 RR(59, 3)	60	4	2050.37195	2050.37155	40	2+4 RR(74, 24)	75	25	2051.34002	2051.34107	-105
2+4 RR(67, 18)	68	19	2050.37614	2050.37780	-165	2+4 RR(63, 3)	64	4	2051.34708	2051.34669	39
2+4 RR(64, 12)	65	13	2050.38712	2050.38761	-49	2+4 PR(56, 9)	57	8	2051.36815	2051.36794	21
2+4 PR(47, 18)	48	17	2050.39456	2050.39439	17	2+4 PR(49, 21)	50	20	2051.39649	2051.39651	-2
2+4 PR(54, 6)	55	5	2050.41123	2050.41100	23	2+4 RR(65, 6)	66	7	2051.39649	2051.39743	-93
2+4 RR(71, 27)	72	28	2050.42655	2050.42725	-70	2+4 PR(42, 33)	43	32	2051.40397	2051.40310	88
2+4 RR(61, 6)	62	7	2050.44021	2050.44055	-34	2+4 RR(73, 21)	74	22	2051.41260	2051.41384	-124
2+4 RR(70, 24)	71	25	2050.45210	2050.45387	-177	2+4 RR(70, 15)	71	16	2051.41260	2051.41398	-138
2+4 PR(49, 15)	50	14	2050.46484	2050.46505	-21	2+4 PR(58, 6)	59	5	2051.42401	2051.42369	32
2+4 PR(56, 3)	57	2	2050.48165	2050.48164	1	2+4 PR(51, 18)	52	17	2051.45596	2051.45599	-3
2+4 RR(66, 15)	67	16	2050.49048	2050.49147	-99	2+4 RR(62, 0)	63	1	2051.47238	2051.47195	44
2+4 RR(58, 0)	59	1	2050.49537	2050.49551	-13	2+4 PR(44, 30)	45	29	2051.47238	2051.47324	-86
2+4 RR(69, 21)	70	22	2050.51748	2050.51665	82	2+4 RR(67, 9)	68	10	2051.48756	2051.48665	91
2+4 PR(51, 12)	52	11	2050.53307	2050.53355	-48	2+4 PR(53, 15)	54	14	2051.51393	2051.51278	115
2+4 RR(63, 9)	64	10	2050.53840	2050.53769	72	2+4 RR(72, 18)	73	19	2051.51393	2051.51538	-146
2+4 PR(39, 33)	40	32	2050.56445	2050.56314	131	2+4 PR(46, 27)	47	26	2051.53928	2051.53947	-19
2+4 PR(46, 21)	47	20	2050.59228	2050.59251	-23	2+4 RR(69, 12)	70	13	2051.55576	2051.55597	-20
2+4 PR(53, 9)	54	8	2050.60039	2050.60050	-12	2+4 RR(75, 24)	76	25	2051.55576	2051.55853	-277
2+4 RR(68, 18)	69	19	2050.60768	2050.60878	-110	2+4 PR(55, 12)	56	11	2051.56731	2051.56736	-5
2+4 RR(60, 3)	61	4	2050.61799	2050.61796	2	2+4 RR(64, 3)	65	4	2051.58601	2051.58607	-6
2+4 RR(65, 12)	66	13	2050.62457	2050.62472	-15	2+4 PR(48, 24)	49	23	2051.60225	2051.60200	25
2+4 PR(41, 30)	42	29	2050.64210	2050.64350	-140	2+4 PR(41, 36)	42	35	2051.60893	2051.60882	11
2+4 RR(72, 27)	73	28	2050.64928	2050.64899	29	2+4 PR(57, 9)	58	8	2051.62069	2051.62034	35
2+4 PR(48, 18)	49	17	2050.66319	2050.66235	85	2+4 RR(66, 6)	67	7	2051.63163	2051.63215	-52
2+4 RR(73, 30)	74	31	2050.66319	2050.66380	-61	2+4 RR(74, 21)	75	22	2051.63163	2051.63381	-217
2+4 PR(55, 6)	56	5	2050.66750	2050.66673	77	2+4 RR(71, 15)	72	16	2051.63921	2051.64029	-108
2+4 RR(62, 6)	63	7	2050.68178	2050.68246	-68	2+4 PR(50, 21)	51	20	2051.66111	2051.66111	0
2+4 PR(43, 27)	44	26	2050.71884	2050.71997	-113	2+4 PR(59, 6)	60	5	2051.67269	2051.67259	9
2+4 RR(67, 15)	68	16	2050.72357	2050.72469	-97	2+4 PR(43, 33)	44	32	2051.67906	2051.67969	-63
2+4 PR(50, 15)	51	14	2050.73078	2050.72954	104	2+4 RR(63, 0)	64	1	2051.71206	2051.71170	36
2+4 RR(59, 0)	60	1	2050.74236	2050.74223	13	2+4 PR(52, 18)	53	17	2051.71780	2051.71713	67
2+4 RR(70, 21)	71	22	2050.74236	2050.74355	-119	2+4 RR(68, 9)	69	10	2051.71780	2051.71981	-201
2+4 RR(64, 9)	65	10	2050.77750	2050.77739	11	2+4 RR(77, 27)	78	28	2051.72943	2051.73160	-217
2+4 PR(45, 24)	46	23	2050.79377	2050.79278	99	2+4 RR(73, 18)	74	19	2051.73582	2051.73771	-189
2+4 PR(52, 12)	53	11	2050.79377	2050.79456	-79	2+4 PR(45, 30)	46	29	2051.74542	2051.74643	-101
2+4 RR(69, 18)	70	19	2050.83689	2050.83802	-113	2+4 PR(54, 15)	55	14	2051.77057	2051.77045	12
2+4 PR(40, 33)	41	32	2050.84420	2050.84482	-62	2+4 RR(70, 12)	71	13	2051.78387	2051.78448	-61
2+4 PR(54, 9)	55	8	2050.86083	2050.85802	281	2+4 PR(47, 27)	48	26	2051.80965	2051.80924	42
2+4 RR(66, 12)	67	13	2050.86083	2050.86011	72	2+4 PR(56, 12)	57	11	2051.82263	2051.82155	109
2+4 PR(47, 21)	48	20	2050.86083	2050.86221	-138	2+4 RR(65, 3)	66	4	2051.82263	2051.82367	-103
2+4 RR(61, 3)	62	4	2050.86083	2050.86272	-189	2+4 RR(75, 21)	76	22	2051.84946	2051.85204	-258
2+4 RR(73, 27)	74	28	2050.86952	2050.86899	53	2+4 RR(72, 15)	73	16	2051.86441	2051.86488	-47
2+4 RR(74, 30)	75	31	2050.88004	2050.88092	-87	2+4 RR(67, 6)	68	7	2051.86441	2051.86508	-67
2+4 RR(72, 24)	73	25	2050.89993	2050.90094	-101	2+4 PR(58, 9)	59	8	2051.87041	2051.87103	-62
2+4 PR(56, 6)	57	5	2050.92141	2050.92075	65	2+4 PR(42, 36)	43	35	2051.88847	2051.88711	136
2+4 PR(42, 30)	43	29	2050.92141	2050.92178	-37	2+4 PR(60, 6)	61	5	2051.92218	2051.91980	238
2+4 RR(63, 6)	64	7	2050.92141	2050.92258	-117	2+4 PR(51, 21)	52	20	2051.92218	2051.92401	-183
2+4 PR(49, 18)	50	17	2050.92847	2050.92860	-12	2+4 RR(64, 0)	65	1	2051.95055	2051.94972	83

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RR(69, 9)	70 10	2051.95055	2051.95134	-79	2+4 PR(52,27)	53 26	2053.13197	2053.13258	-60
2+4 PR(44,33)	45 32	2051.95632	2051.95458	174	2+4 PR(54,24)	55 23	2053.17381	2053.17450	-70
2+4 RR(74,18)	75 19	2051.95632	2051.95832	-200	2+4 RR(71, 3)	72 4	2053.21297	2053.21163	134
2+4 PR(53,18)	54 17	2051.97566	2051.97657	-91	2+4 PR(56,21)	57 20	2053.21297	2053.21294	3
2+4 RR(77,24)	78 25	2051.98661	2051.98827	-165	2+4 RR(73, 6)	74 7	2053.22385	2053.22462	-78
2+4 RR(71,12)	72 13	2052.01114	2052.01127	-13	2+4 PR(58,18)	59 17	2053.24806	2053.24819	-13
2+4 PR(46,30)	47 29	2052.01783	2052.01792	-9	2+4 PR(60,15)	61 14	2053.28127	2053.28067	60
2+4 PR(55,15)	56 14	2052.02684	2052.02642	43	2+4 PR(49,33)	50 32	2053.30294	2053.30359	-65
2+4 RR(66, 3)	67 4	2052.06023	2052.05948	75	2+4 PR(62,12)	63 11	2053.31068	2053.31084	-16
2+4 PR(57,12)	58 11	2052.07526	2052.07403	123	2+4 PR(64, 9)	65 8	2053.34053	2053.33936	117
2+4 RR(73,15)	74 16	2052.08622	2052.08774	-152	2+4 PR(51,30)	52 29	2053.35026	2053.34987	39
2+4 RR(68, 6)	69 7	2052.09617	2052.09620	-3	2+4 PR(53,27)	54 26	2053.39286	2053.39214	72
2+4 PR(59, 9)	60 8	2052.12047	2052.12002	45	2+4 PR(55,24)	56 23	2053.43122	2053.43063	59
2+4 PR(50,24)	51 23	2052.13299	2052.13297	1	2+4 RR(74, 6)	75 7	2053.44408	2053.44486	-78
2+4 PR(43,36)	44 35	2052.16480	2052.16370	110	2+4 PR(57,21)	58 20	2053.46624	2053.46561	62
2+4 PR(61, 6)	62 5	2052.16480	2052.16529	-50	2+4 PR(59,18)	60 17	2053.49813	2053.49741	73
2+4 RR(75,18)	76 19	2052.17525	2052.17719	-194	2+4 PR(48,36)	49 35	2053.52133	2053.52121	12
2+4 PR(52,21)	53 20	2052.18561	2052.18520	42	2+4 PR(61,15)	62 14	2053.52742	2053.52640	102
2+4 RR(65, 0)	66 1	2052.18561	2052.18599	-38	2+4 PR(63,12)	64 11	2053.55307	2053.55309	-2
2+4 PR(45,33)	46 32	2052.22841	2052.22778	63	2+4 PR(50,33)	51 32	2053.56809	2053.56829	-20
2+4 PR(54,18)	55 17	2052.23496	2052.23430	66	2+4 PR(65, 9)	66 8	2053.57915	2053.57811	104
2+4 RR(72,12)	73 13	2052.23496	2052.23635	-139	2+4 PR(52,30)	53 29	2053.61089	2053.61116	-26
2+4 PR(56,15)	57 14	2052.28126	2052.28068	58	2+4 PR(54,27)	55 26	2053.65015	2053.65001	15
2+4 PR(47,30)	48 29	2052.28825	2052.28771	55	2+4 PR(56,24)	57 23	2053.68526	2053.68506	20
2+4 RR(67, 3)	68 4	2052.29380	2052.29350	29	2+4 PR(58,21)	59 20	2053.71678	2053.71659	19
2+4 RR(74,15)	75 16	2052.30760	2052.30888	-129	2+4 PR(60,18)	61 17	2053.74540	2053.74491	49
2+4 PR(58,12)	59 11	2052.32503	2052.32480	23	2+4 PR(62,15)	63 14	2053.77118	2053.77043	75
2+4 RR(69, 6)	70 7	2052.32503	2052.32551	-48	2+4 PR(64,12)	65 11	2053.79392	2053.79362	30
2+4 PR(49,27)	50 26	2052.34315	2052.34367	-52	2+4 PR(66, 9)	67 8	2053.81660	2053.81515	145
2+4 PR(60, 9)	61 8	2052.36783	2052.36730	53	2+4 PR(51,33)	52 32	2053.83151	2053.83130	21
2+4 RR(76,18)	77 19	2052.39474	2052.39434	40	2+4 PR(53,30)	54 29	2053.87090	2053.87075	15
2+4 PR(51,24)	52 23	2052.39474	2052.39591	-117	2+4 PR(55,27)	56 26	2053.90662	2053.90617	45
2+4 PR(62, 6)	63 5	2052.40985	2052.40908	77	2+4 PR(57,24)	58 23	2053.93800	2053.93778	22
2+4 RR(71, 9)	72 10	2052.40985	2052.40953	32	2+4 PR(59,21)	60 20	2053.96598	2053.96586	13
2+4 RR(66, 0)	67 1	2052.42074	2052.42053	21	2+4 PR(61,18)	62 17	2053.99216	2053.99072	145
2+4 PR(53,21)	54 20	2052.44487	2052.44469	19	2+4 PR(48,39)	49 38	2054.00716	2054.00767	-51
2+4 RR(73,12)	74 13	2052.46027	2052.45971	56	2+4 PR(63,15)	64 14	2054.01412	2054.01275	137
2+4 PR(55,18)	56 17	2052.49063	2052.49033	30	2+4 PR(65,12)	66 11	2054.03268	2054.03246	22
2+4 RR(68, 3)	69 4	2052.52639	2052.52573	65	2+4 PR(67, 9)	68 8	2054.05215	2054.05049	167
2+4 RR(75,15)	76 16	2052.52639	2052.52830	-192	2+4 PR(50,36)	51 35	2054.05215	2054.05234	-18
2+4 PR(57,15)	58 14	2052.53361	2052.53323	38	2+4 PR(52,33)	53 32	2054.09279	2054.09261	18
2+4 RR(70, 6)	71 7	2052.55311	2052.55301	10	2+4 PR(54,30)	55 29	2054.12828	2054.12864	-36
2+4 PR(59,12)	60 11	2052.57427	2052.57387	40	2+4 PR(56,27)	57 26	2054.16111	2054.16063	48
2+4 PR(50,27)	51 26	2052.60851	2052.60834	17	2+4 PR(58,24)	59 23	2054.18862	2054.18880	-18
2+4 RR(77,18)	78 19	2052.60851	2052.60977	-126	2+4 PR(60,21)	61 20	2054.21413	2054.21342	71
2+4 PR(61, 9)	62 8	2052.61393	2052.61287	106	2+4 PR(62,18)	63 17	2054.23552	2054.23481	70
2+4 RR(72, 9)	73 10	2052.63629	2052.63619	11	2+4 PR(64,15)	65 14	2054.25406	2054.25337	69
2+4 RR(67, 0)	68 1	2052.65307	2052.65333	-26	2+4 PR(66,12)	67 11	2054.27081	2054.26959	123
2+4 RR(74,12)	75 13	2052.68195	2052.68135	60	2+4 PR(68, 9)	69 8	2054.28579	2054.28412	167
2+4 PR(54,21)	55 20	2052.70267	2052.70247	20	2+4 PR(51,36)	52 35	2054.31414	2054.31535	-121
2+4 PR(56,18)	57 17	2052.74514	2052.74466	49	2+4 PR(53,33)	54 32	2054.35288	2054.35222	67
2+4 RR(76,15)	77 16	2052.74514	2052.74600	-85	2+4 PR(55,30)	56 29	2054.38455	2054.38483	-28
2+4 RR(69, 3)	70 4	2052.75576	2052.75617	-41	2+4 PR(57,27)	58 26	2054.41429	2054.41339	90
2+4 PR(47,33)	48 32	2052.76830	2052.76908	-78	2+4 PR(59,24)	60 23	2054.43798	2054.43812	-14
2+4 RR(71, 6)	72 7	2052.77796	2052.77870	-74	2+4 PR(61,21)	62 20	2054.46054	2054.45928	125
2+4 PR(58,15)	59 14	2052.78476	2052.78408	68	2+4 PR(63,18)	64 17	2054.47828	2054.47721	107
2+4 PR(60,12)	61 11	2052.82204	2052.82123	81	2+4 PR(65,15)	66 14	2054.49364	2054.49228	135
2+4 PR(49,30)	50 29	2052.82204	2052.82219	-15	2+4 PR(67,12)	68 11	2054.50575	2054.50501	74
2+4 RR(78,18)	79 19	2052.82204	2052.82347	-143	2+4 PR(69, 9)	70 8	2054.51811	2054.51605	206
2+4 PR(62, 9)	63 8	2052.85716	2052.85674	42	2+4 PR(50,39)	51 38	2054.53814	2054.53879	-65
2+4 PR(51,27)	52 26	2052.87084	2052.87131	-47	2+4 PR(52,36)	53 35	2054.57663	2054.57667	-4
2+4 RR(68, 0)	69 1	2052.88508	2052.88439	69	2+4 PR(54,33)	55 32	2054.61181	2054.61012	169
2+4 PR(75,12)	76 13	2052.90112	2052.90128	-17	2+4 PR(56,30)	57 29	2054.63978	2054.63932	46
2+4 PR(53,24)	54 23	2052.91655	2052.91667	-12	2+4 PR(58,27)	59 26	2054.66525	2054.66445	79
2+4 PR(55,21)	56 20	2052.95934	2052.95856	78	2+4 PR(60,24)	61 23	2054.68630	2054.68574	56
2+4 RR(77,15)	78 16	2052.95934	2052.96127	-193	2+4 PR(62,21)	63 20	2054.70402	2054.70344	58
2+4 PR(46,36)	47 35	2052.98411	2052.98330	81	2+4 PR(64,18)	65 17	2054.71989	2054.71790	200
2+4 RR(70, 3)	71 4	2052.98411	2052.98480	-69	2+4 PR(66,15)	67 14	2054.73105	2054.72949	156
2+4 PR(57,18)	58 17	2052.99767	2052.99728	39	2+4 PR(68,12)	69 11	2054.74026	2054.73872	154
2+4 RR(72, 6)	73 7	2053.00347	2053.00257	90	2+4 PR(53,36)	54 35	2054.83628	2054.83629	0
2+4 PR(59,15)	60 14	2053.03445	2053.03323	122	2+4 PR(55,33)	56 32	2054.86623	2054.86633	-10
2+4 RR(79,18)	80 19	2053.03445	2053.03545	-101	2+4 PR(57,30)	58 29	2054.89247	2054.89211	35
2+4 PR(61,12)	62 11	2053.06787	2053.06689	98	2+4 PR(59,27)	60 26	2054.91460	2054.91381	79
2+4 PR(50,30)	51 29	2053.08669	2053.08688	-19	2+4 PR(61,24)	62 23	2054.93164	2054.93165	-1
2+4 PR(63, 9)	64 8	2053.10022	2053.09890	132	2+4 PR(63,21)	64 20	2054.94673	2054.94590	83
2+4 RR(69, 0)	70 1	2053.11363	2053.11371	-8	2+4 PR(65,18)	66 17	2054.95835	2054.95688	146
2+4 RR(76,12)	77 13	2053.11964	2053.11950	14	2+4 PR(67,15)	68 14	2054.96657	2054.96499	158

Table II
Observed and Calculated Transition Wavenumbers in the $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$ Bands of $\text{F}^{37}\text{Cl}^{16}\text{O}_3$

(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RP (60, 0)	59 1	1983.96192	1983.96304	-112	2+4 RP (49, 15)	48 16	1987.07357	1987.07381	-23
2+4 RP (57, 9)	56 10	1984.22928	1984.22883	45	2+4 PP (69, 48)	68 47	1987.07902	1987.07887	14
2+4 RP (59, 0)	58 1	1984.40905	1984.40930	-25	2+4 RP (52, 3)	51 4	1987.14371	1987.14319	52
2+4 RP (56, 9)	55 10	1984.66988	1984.66952	36	2+4 RP (50, 9)	49 10	1987.28158	1987.28119	39
2+4 RP (58, 0)	57 1	1984.85402	1984.85401	1	2+4 RP (49, 12)	48 13	1987.37924	1987.37914	10
2+4 RP (55, 9)	54 10	1985.10844	1985.10867	-23	2+4 PP (58, 18)	57 17	1987.43801	1987.43635	167
2+4 RP (54, 12)	53 13	1985.21203	1985.21249	-45	2+4 PP (57, 15)	56 14	1987.43801	1987.43785	16
2+4 RP (57, 0)	56 1	1985.29627	1985.29716	-89	2+4 PP (59, 21)	58 20	1987.43801	1987.43843	-42
2+4 RP (54, 9)	53 10	1985.54598	1985.54627	-29	2+4 PP (60, 24)	59 23	1987.44444	1987.44345	99
2+4 PP (64, 24)	63 23	1985.65621	1985.65506	115	2+4 PP (56, 12)	55 11	1987.44444	1987.44373	71
2+4 PP (63, 21)	62 20	1985.65621	1985.65574	47	2+4 PP (61, 27)	60 26	1987.45056	1987.45084	-28
2+4 PP (65, 27)	64 26	1985.65621	1985.65675	-54	2+4 PP (62, 30)	61 29	1987.46013	1987.46012	1
2+4 PP (62, 18)	61 17	1985.65621W	1985.65932	-311	2+4 PP (63, 33)	62 32	1987.47153	1987.47087	66
2+4 PP (66, 30)	65 29	1985.65621W	1985.66030	-409	2+4 RP (52, 0)	51 1	1987.48905	1987.48947	-42
2+4 PP (68, 36)	67 35	1985.66721W	1985.67139	-418	2+4 PP (65, 39)	64 38	1987.49668	1987.49538	130
2+4 PP (69, 39)	68 38	1985.67975	1985.67825	150	2+4 PP (66, 42)	65 41	1987.50993	1987.50852	141
2+4 RP (56, 0)	55 1	1985.73809	1985.73875	-66	2+4 PP (67, 45)	66 44	1987.52279	1987.52191	89
2+4 RP (52, 15)	51 16	1985.77654	1985.77725	-71	2+4 PP (68, 48)	67 47	1987.53326	1987.53531	-206
2+4 RP (53, 9)	52 10	1985.98217	1985.98233	-17	2+4 RP (51, 3)	50 4	1987.57614	1987.57557	57
2+4 PP (63, 24)	62 23	1986.10543	1986.10441	102	2+4 RP (47, 18)	46 19	1987.65822	1987.65832	-10
2+4 PP (61, 18)	60 17	1986.10543	1986.10584	-41	2+4 RP (49, 9)	48 10	1987.71116	1987.71102	13
2+4 PP (64, 27)	63 26	1986.10543	1986.10752	-208	2+4 RP (48, 12)	47 13	1987.80706	1987.80777	-71
2+4 PP (60, 15)	59 14	1986.11244	1986.11158	86	2+4 PP (57, 18)	56 17	1987.87752	1987.87682	70
2+4 PP (65, 30)	64 29	1986.11244	1986.11250	-5	2+4 PP (56, 15)	55 14	1987.87752	1987.87691	61
2+4 PP (66, 33)	65 32	1986.11922	1986.11893	29	2+4 PP (58, 21)	57 20	1987.87752	1987.88033	-281
2+4 PP (59, 12)	58 11	1986.11922	1986.12169	-246	2+4 PP (55, 12)	54 11	1987.87752W	1987.88137	-385
2+4 PP (67, 36)	66 35	1986.12547	1986.12646	-99	2+4 PP (60, 27)	59 26	1987.89568	1987.89561	7
2+4 PP (68, 39)	67 38	1986.13527	1986.13476	52	2+4 PP (61, 30)	60 29	1987.90668	1987.90633	35
2+4 PP (69, 42)	68 41	1986.14417	1986.14354	63	2+4 PP (62, 33)	61 32	1987.91979	1987.91853	126
2+4 PP (70, 45)	69 44	1986.15273	1986.15255	19	2+4 PP (63, 36)	62 35	1987.93229	1987.93184	45
2+4 PP (71, 48)	70 47	1986.15955	1986.16156	-200	2+4 PP (64, 39)	63 38	1987.94406	1987.94594	-188
2+4 RP (55, 0)	54 1	1986.17907	1986.17878	29	2+4 PP (65, 42)	64 41	1987.96129	1987.96054	74
2+4 RP (51, 15)	50 16	1986.21030	1986.21101	-71	2+4 PP (66, 45)	65 44	1987.97535	1987.97539	-4
2+4 RP (52, 9)	51 10	1986.41629	1986.41684	-55	2+4 RP (50, 3)	49 4	1988.00689	1988.00641	48
2+4 RP (51, 12)	50 13	1986.51710	1986.51717	-7	2+4 RP (48, 9)	47 10	1988.13946	1988.13930	16
2+4 PP (61, 21)	60 20	1986.55140	1986.55009	131	2+4 RP (47, 12)	46 13	1988.23475	1988.23482	-7
2+4 PP (60, 18)	59 17	1986.55140	1986.55085	55	2+4 PP (55, 15)	54 14	1988.31508	1988.31444	64
2+4 PP (62, 24)	61 23	1986.55140	1986.55226	-86	2+4 PP (56, 18)	55 17	1988.31508	1988.31578	-70
2+4 PP (59, 15)	58 14	1986.55678	1986.55519	160	2+4 PP (54, 12)	53 11	1988.31508	1988.31749	-240
2+4 PP (63, 27)	62 26	1986.55678	1986.55679	-1	2+4 PP (57, 21)	56 20	1988.32087	1988.32072	14
2+4 PP (64, 30)	63 29	1986.56482	1986.56320	162	2+4 PP (58, 24)	57 23	1988.32837	1988.32861	-24
2+4 PP (58, 12)	57 11	1986.56482	1986.56388	94	2+4 PP (59, 27)	58 26	1988.33971	1988.33887	84
2+4 PP (66, 36)	65 35	1986.58088	1986.58004	83	2+4 PP (60, 30)	59 29	1988.35384	1988.35104	280
2+4 PP (67, 39)	66 38	1986.59161	1986.58978	183	2+4 RP (50, 0)	49 1	1988.35384	1988.35540	-156
2+4 PP (68, 42)	67 41	1986.59811	1986.60001	-190	2+4 PP (61, 33)	60 32	1988.36481	1988.36469	12
2+4 PP (69, 45)	68 44	1986.61130	1986.61048	82	2+4 PP (62, 36)	61 35	1988.37985	1988.37945	41
2+4 RP (54, 0)	53 1	1986.61822	1986.61724	97	2+4 PP (63, 39)	62 38	1988.39628	1988.39501	127
2+4 PP (70, 48)	69 47	1986.61822	1986.62095	-274	2+4 PP (64, 42)	63 41	1988.41187	1988.41107	80
2+4 RP (51, 9)	50 10	1986.84863	1986.84979	-116	2+4 PP (65, 45)	64 44	1988.42673	1988.42739	-67
2+4 RP (50, 12)	49 13	1986.94898	1986.94894	4	2+4 RP (49, 3)	48 4	1988.43609	1988.43571	39
2+4 PP (59, 18)	58 17	1986.99586	1986.99435	151	2+4 PP (66, 48)	65 47	1988.44138	1988.44375	-237
2+4 PP (60, 21)	59 20	1986.99586	1986.99502	85	2+4 RP (47, 9)	46 10	1988.56544	1988.56601	-57
2+4 PP (58, 15)	57 14	1986.99586	1986.99728	-142	2+4 RP (46, 12)	45 13	1988.66006	1988.66030	-24
2+4 PP (61, 24)	60 23	1986.99586	1986.99861	-274	2+4 PP (54, 15)	53 14	1988.75185	1988.75046	139
2+4 PP (62, 27)	61 26	1987.00538	1987.00456	82	2+4 PP (53, 12)	52 11	1988.75185	1988.75208	-23
2+4 PP (57, 12)	56 11	1987.00538	1987.00456	82	2+4 PP (55, 18)	54 17	1988.75185	1988.75322	-138
2+4 PP (63, 30)	62 29	1987.01239	1987.01241	-2	2+4 PP (56, 21)	55 20	1988.75981	1988.75960	22
2+4 PP (64, 33)	63 32	1987.02043	1987.02172	-129	2+4 PP (57, 24)	56 23	1988.77035	1988.76892	143
2+4 PP (65, 36)	64 35	1987.03357	1987.03213	144	2+4 RP (45, 15)	44 16	1988.78083	1988.78044	39
2+4 RP (53, 0)	52 1	1987.05520	1987.05414	106	2+4 PP (58, 27)	57 26	1988.78083	1988.78063	21
2+4 PP (67, 42)	66 41	1987.05520	1987.05501	19	2+4 PP (59, 30)	58 29	1988.79420	1988.79424	-4
2+4 PP (68, 45)	67 44	1987.06494	1987.06693	-199	2+4 PP (60, 33)	59 32	1988.80997	1988.80934	63

(I) The band type (2+4 and 225 correspond to $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$, respectively), the branch, (J lower and K lower) are reported.

(II) J upper and K upper

(III) Observed wavenumbers (in cm^{-1}).

(IV) Calculated wavenumbers (in cm^{-1}).

(.V) Observed – Calculated values (in 10^5cm^{-1}).

Observed wavenumbers identified by a W in column (III) have not been included in the fit.

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(I)					(II)					(III)					(IV)					(V)								
2+4	PP(61,36)	60	35	1988.82589	1988.82556	33	2+4	PP(60,45)	59	44	1990.66465	1990.66499	-33		2+4	PP(62,39)	61	38	1988.84305	1988.84258	47	2+4	RP(42,9)	41	10	1990.67614	1990.67596	18
2+4	PP(63,42)	62	41	1988.86178	1988.86011	167	2+4	PP(61,48)	60	47	1990.68459W	1990.68876	-416		2+4	PP(64,45)	63	44	1988.87737	1988.87790	-53	2+4	PP(47,9)	46	8	1990.89806W	1990.90184	-377
2+4	RP(48,3)	47	4	1988.86178	1988.86345	-167	2+4	RP(41,12)	40	13	1990.76315	1990.76395	-80		2+4	PP(65,48)	64	47	1988.89189W	1988.89574	-385	2+4	PP(48,12)	47	11	1990.89806W	1990.90204	-398
2+4	PP(55,21)	54	20	1989.19774	1989.19695	79	2+4	PP(49,15)	48	14	1990.90828	1990.90759	68		2+4	RP(46,9)	45	10	1988.99170	1988.99115	55	2+4	PP(50,18)	49	17	1990.91645	1990.91755	-110
2+4	RP(45,12)	44	13	1989.08350	1989.08420	-70	2+4	RP(44,0)	43	1	1990.91645	1990.91522	123		2+4	PP(53,15)	52	14	1989.18547	1989.18495	52	2+4	PP(51,21)	50	20	1990.93094	1990.93114	-20
2+4	PP(54,18)	53	17	1989.18547W	1989.18914	-368	2+4	PP(52,24)	51	23	1990.94680	1990.94770	-91		2+4	PP(52,12)	51	11	1989.18547	1989.18514	33	2+4	PP(53,27)	52	26	1990.96560	1990.96668	-107
2+4	PP(56,24)	55	23	1989.20792	1989.20771	20	2+4	RP(43,3)	42	4	1990.97927	1990.97878	49		2+4	RP(44,15)	43	16	1989.20257	1989.20313	-57	2+4	PP(54,30)	53	29	1990.98756	1990.98758	-2
2+4	RP(48,0)	47	1	1989.21603	1989.21501	102	2+4	PP(55,33)	54	32	1991.00991	1991.00998	-8		2+4	PP(56,24)	55	23	1989.20792	1989.20771	20	2+4	RP(39,18)	38	19	1991.02504	1991.02421	83
2+4	PP(57,27)	56	26	1989.22151	1989.22087	64	2+4	PP(56,36)	55	35	1991.03362	1991.03353	9		2+4	PP(57,27)	56	26	1989.22151	1989.22087	64	2+4	PP(57,39)	56	38	1991.05874	1991.05790	84
2+4	PP(58,30)	57	29	1989.23564	1989.23593	-29	2+4	PP(58,42)	57	41	1991.08306	1991.08281	25		2+4	PP(59,33)	58	32	1989.25281	1989.25249	32	2+4	RP(41,9)	40	10	1991.09328	1991.09322	6
2+4	PP(59,33)	58	32	1989.25281	1989.25249	32	2+4	RP(40,12)	39	13	1991.12937W	1991.13327	-390		2+4	PP(60,36)	59	35	1989.27052	1989.27017	35	2+4	PP(59,45)	58	44	1991.10819	1991.10801	18
2+4	PP(60,36)	59	35	1989.27052	1989.27017	35	2+4	PP(61,39)	60	38	1991.12937W	1991.13327	-390		2+4	PP(62,42)	61	41	1989.28977	1989.28865	111	2+4	PP(60,48)	59	47	1991.12937W	1991.13327	-390
2+4	PP(61,39)	60	38	1989.28977	1989.28865	111	2+4	PP(62,42)	61	41	1989.30759	1989.30765	-7		2+4	PP(63,45)	62	44	1989.28977	1989.28963	13	2+4	RP(40,12)	39	13	1991.18010	1991.17991	19
2+4	PP(62,42)	61	41	1989.30759	1989.30765	-7	2+4	PP(63,45)	62	44	1989.32704	1989.32692	12		2+4	PP(64,48)	63	47	1989.32704	1989.32692	12	2+4	RP(39,15)	38	16	1991.29089	1991.29267	-178
2+4	PP(63,45)	62	44	1989.32704	1989.32692	12	2+4	PP(64,48)	63	47	1989.34245W	1989.34623	-379		2+4	RP(43,18)	42	19	1989.34245W	1989.34623	-379	2+4	PP(46,9)	45	8	1991.32418	1991.32577	-160
2+4	PP(64,48)	63	47	1989.34245W	1989.34623	-379	2+4	RP(43,18)	42	19	1989.35316	1989.35409	-93		2+4	PP(45,9)	44	10	1989.35316	1989.35409	-93	2+4	PP(47,12)	46	11	1991.32926	1991.32742	184
2+4	RP(43,18)	42	19	1989.35316	1989.35409	-93	2+4	RP(45,9)	44	10	1989.41487	1989.41471	15		2+4	PP(44,12)	43	13	1989.41487	1989.41471	15	2+4	PP(45,6)	44	5	1991.32926	1991.33063	-137
2+4	RP(45,9)	44	10	1989.41487	1989.41471	15	2+4	PP(44,12)	43	13	1989.50689	1989.50651	38		2+4	PP(51,12)	50	11	1989.50689	1989.50651	38	2+4	PP(48,15)	47	14	1991.33553	1991.33441	112
2+4	PP(44,12)	43	13	1989.50689	1989.50651	38	2+4	PP(51,12)	50	11	1989.61762	1989.61667	95		2+4	PP(52,15)	51	14	1989.61762	1989.61791	-29	2+4	RP(43,0)	42	1	1991.33553	1991.33629	-76
2+4	PP(51,12)	50	11	1989.61762	1989.61667	95	2+4	PP(52,15)	51	14	1989.61762	1989.61791	-29		2+4	PP(53,18)	52	17	1989.61762	1989.62354	99	2+4	PP(49,18)	48	17	1991.34499	1991.34582	-83
2+4	PP(52,15)	51	14	1989.61762	1989.61791	-29	2+4	PP(53,18)	52	17	1989.62453	1989.62354	99		2+4	PP(43,15)	42	16	1989.62453	1989.62423	29	2+4	PP(50,21)	49	20	1991.36018	1991.36087	-69
2+4	PP(53,18)	52	17	1989.62453	1989.62354	99	2+4	PP(43,15)	42	16	1989.62453	1989.62423	29		2+4	PP(54,21)	53	20	1989.62453	1989.62423	29	2+4	PP(51,24)	50	23	1991.37863	1991.37889	-26
2+4	PP(43,15)	42	16	1989.62453	1989.62423	29	2+4	PP(54,21)	53	20	1989.63198	1989.63279	-81		2+4	PP(47,0)	46	1	1989.63198	1989.63279	-81	2+4	RP(42,3)	41	4	1991.39840	1991.39716	124
2+4	PP(54,21)	53	20	1989.63198	1989.63279	-81	2+4	PP(47,0)	46	1	1989.64357	1989.64244	113		2+4	PP(55,24)	54	23	1989.64357	1989.64499	-142	2+4	PP(52,27)	51	26	1991.39840	1991.39932	-92
2+4	PP(47,0)	46	1	1989.64357	1989.64244	113	2+4	PP(55,24)	54	23	1989.64357	1989.64499	-142		2+4	PP(56,27)	55	26	1989.64357	1989.64499	-142	2+4	PP(53,30)	52	29	1991.42162	1991.42169	-7
2+4	PP(55,24)	54	23	1989.64357	1989.64499	-142	2+4	PP(56,27)	55	26	1989.65936	1989.65960	-23		2+4	PP(57,30)	56	29	1989.65936	1989.65960	-23	2+4	RP(41,6)	40	7	1991.44460	1991.44364	96
2+4	PP(56,27)	55	26	1989.65936	1989.65960	-23	2+4	PP(57,30)	56	29	1989.67617	1989.67612	6		2+4	PP(58,33)	57	32	1989.67617	1989.67612	6	2+4	PP(54,33)	53	32	1991.44460	1991.44557	-97
2+4	PP(57,30)	56	29	1989.67617	1989.67612	6	2+4	PP(58,33)	57	32	1989.69458	1989.69413	45		2+4	PP(59,36)	58	35	1989.69458	1989.69413	45	2+4	PP(55,36)	54	35	1991.47095	1991.47059	36
2+4	PP(58,33)	57	32	1989.69458	1989.69413	45	2+4	PP(59,36)	58	35	1989.71412	1989.71327	85		2+4	RP(46,3)	45	4	1989.71412	1989.71426	-14	2+4	PP(56,39)	55	38	1991.49738	1991.49644	94
2+4	PP(59,36)	58	35	1989.71412	1989.71327	85	2+4	RP(46,3)	45	4	1989.71412	1989.71426	-14		2+4	PP(60,39)	59	38	1989.71412	1989.71426	-14	2+4	RP(40,9)	39	10	1991.50879	1991.50889	-10
2+4	RP(46,3)	45	4	1989.71412	1989.71426	-14	2+4	PP(60,39)	59	38	1989.73459	1989.73322	137		2+4	PP(61,42)	60	41	1989.73459	1989.73322	137	2+4	PP(57,42)	56	41	1991.52237	1991.52283	-46
2+4	PP(60,39)	59	38	1989.73459	1989.73322	137	2+4	PP(61,42)	60	41	1989.75507	1989.75370	138		2+4	PP(42,18)	41	19	1989.75507	1989.75370	138	2+4	PP(58,45)	57	44	1991.54955	1991.54952	3
2+4	PP(61,42)	60	41	1989.75507	1989.75370	138	2+4	PP(42,18)	41	19	1989.77431	1989.77403	28		2+4	PP(62,45)	61	44	1989.77431	1989.77444	-13	2+4	PP(59,48)	58	47	1991.57245W	1991.57627	-382
2+4	PP(42,18)	41	19	1989.77431	1989.77403	28	2+4	PP(62,45)	61	44	1989.77431	1989.77444	-13		2+4	PP(63,48)	62	47	1989.77431	1989.77444	-13	2+4	RP(39,12)	38	13	1991.59367	1991.59428	-61
2+4	PP(62,45)	61	44	1989.77431	1989.77444	-13	2+4	PP(63,48)	62	47	1989.79239	1989.79524	-285		2+4	PP(64,48)	63	47	1989.79239	1989.79524	-285	2+4	PP(45,9)	44	8	1991.74539	1991.74816	-277
2+4	PP(63,48)	62	47	1989.79239	1989.79524	-285	2+4	PP(64,48)	63	47	1989.83593	1989.83671	-78		2+4	PP(43,12)	42	13	1989.83593	1989.83671	-78	2+4	PP(46,12)	45	11	1991.75252	1991.75125	126
2+4	PP(43,12)	42	13	1989.83593	1989.83671	-78	2+4	PP(43,12)	42	13	1989.92679	1989.92725	-46		2+4	PP(50,12)	49	11	1989.92679	1989.92725	-46	2+4	PP(44,6)	43	5	1991.75252	1991.75158	94
2+4	PP(50,12)	49	11	1989.92679	1989.92725	-46	2+4	PP(50,12)	49	11	1990.04736	1990.04666	70		2+4	PP(51,15)	50	14	1990.04736	1990.04666	70	2+4	PP(47,15)	46	14	1991.75953	1991.75970	-17
2+4	PP(51,15)	50	14	1990.04736	1990.04666	70	2+4	PP(51,15)	50	14	1990.04736	1990.04666	70		2+4	PP(52,18)	51	17	1990.04736	1990.04666	70	2+4	PP(48,18)	47	17	1991.77282	1991.77256	26
2+4	PP(52,18)	51	17	1990.05704	1990.05641	63	2+4	PP(52,18)	51	17	1990.05704	1990.05641	63		2+4	PP(53,21)	52	20	1990.05704	1990.05641	63	2+4	PP(49,21)	48	20	1991.78923	1991.78906	17
2+4	PP(53,21)	52	20	1990.06752	1990.06710																							

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
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5	2+4 PP(53,36)	52 35	1992.34006	1992.34016	-10	2+4 PP(45,24)	44 23	1993.93326	1993.93380	-54	
6	2+4 PP(54,39)	53 38	1992.36997	1992.36898	99	2+4 PP(46,27)	45 26	1993.96305	1993.96308	-2	
7	2+4 PP(55,42)	54 41	1992.39925	1992.39834	90	2+4 RP(34, 9)	33 10	1993.96893	1993.96951	-58	
8	2+4 PP(56,45)	55 44	1992.42808	1992.42801	7	2+4 PP(47,30)	46 29	1993.99414	1993.99431	-17	
9	2+4 PP(57,48)	56 47	1992.45402W	1992.45776	-374	2+4 PP(48,33)	47 32	1994.02653	1994.02708	-54	
10	2+4 PP(43, 9)	42 8	1992.58852	1992.58829	23	2+4 RP(33,12)	32 13	1994.04625	1994.04689	-64	
11	2+4 PP(42, 6)	41 5	1992.58852	1992.58880	-29	2+4 PP(49,36)	48 35	1994.06118	1994.06101	17	
12	2+4 RP(40, 0)	39 1	1992.58852	1992.58992	-141	2+4 PP(50,39)	49 38	1994.09636	1994.09579	56	
13	2+4 PP(44,12)	43 11	1992.59542	1992.59428	114	2+4 PP(51,42)	50 41	1994.13109	1994.13115	-6	
14	2+4 PP(41, 3)	40 2	1992.59542	1992.59737	-194	2+4 RP(32,15)	31 16	1994.15079	1994.15056	23	
15	2+4 PP(45,15)	44 14	1992.60577	1992.60563	14	2+4 PP(52,45)	51 44	1994.16628	1994.16682	-53	
16	2+4 PP(46,18)	45 17	1992.62111	1992.62141	-30	2+4 PP(53,48)	52 47	1994.19710W	1994.20259	-548	
17	2+4 PP(47,21)	46 20	1992.64128	1992.64084	44	2+4 RP(36, 0)	35 1	1994.23897	1994.23898	-1	
18	2+4 RP(39, 3)	38 4	1992.64128	1992.64285	-157	2+4 PP(38, 6)	37 5	1994.24579	1994.24454	125	
19	2+4 PP(48,24)	47 23	1992.66294	1992.66326	-32	2+4 PP(37, 3)	36 2	1994.24579	1994.24720	-141	
20	2+4 RP(35,18)	34 19	1992.66977	1992.66851	126	2+4 PP(39, 9)	38 8	1994.24985	1994.24986	-2	
21	2+4 RP(38, 6)	37 7	1992.68713	1992.68552	161	2+4 PP(40,12)	39 11	1994.26162	1994.26171	-9	
22	2+4 PP(49,27)	48 26	1992.68713	1992.68810	-97	2+4 PP(41,15)	40 14	1994.27915	1994.27892	23	
23	2+4 PP(50,30)	49 29	1992.71428	1992.71489	-60	2+4 RP(42,18)	41 17	1994.30044	1994.30058	-14	
24	2+4 PP(51,33)	50 32	1992.74367	1992.74320	47	2+4 RP(34, 6)	33 7	1994.31909	1994.31898	10	
25	2+4 PP(52,36)	51 35	1992.77307	1992.77266	41	2+4 PP(43,21)	42 20	1994.32559	1994.32590	-32	
26	2+4 PP(53,39)	52 38	1992.80368	1992.80297	72	2+4 PP(44,24)	43 23	1994.35380	1994.35423	-43	
27	2+4 PP(54,42)	53 41	1992.83428	1992.83383	45	2+4 RP(33, 9)	32 10	1994.37405	1994.37403	3	
28	2+4 PP(55,45)	54 44	1992.86479	1992.86499	-20	2+4 PP(45,27)	44 26	1994.38448	1994.38499	-51	
29	2+4 PP(56,48)	55 47	1992.89184W	1992.89624	-440	2+4 PP(46,30)	45 29	1994.41757	1994.41771	-14	
30	2+4 RP(35,15)	34 16	1992.93386	1992.93543	-157	2+4 RP(32,12)	31 13	1994.45188	1994.45004	185	
31	2+4 RP(39, 0)	38 1	1993.00525	1993.00459	65	2+4 PP(47,33)	46 32	1994.45188	1994.45197	-9	
32	2+4 PP(41, 6)	40 5	1993.00525	1993.00508	17	2+4 PP(48,36)	47 35	1994.48767	1994.48740	27	
33	2+4 PP(42, 9)	41 8	1993.00525	1993.00602	-77	2+4 PP(49,39)	48 38	1994.52509	1994.52368	141	
34	2+4 PP(40, 3)	39 2	1993.01331	1993.01217	114	2+4 PP(50,42)	49 41	1994.56139	1994.56054	85	
35	2+4 PP(43,12)	42 11	1993.01331	1993.01347	-16	2+4 PP(51,45)	50 44	1994.59719	1994.59771	-52	
36	2+4 PP(44,15)	43 14	1993.02654	1993.02628	26	2+4 PP(52,48)	51 47	1994.63042W	1994.63500	-457	
37	2+4 PP(45,18)	44 17	1993.04329	1993.04353	-24	2+4 RP(35, 0)	34 1	1994.64755	1994.64721	33	
38	2+4 RP(38, 3)	37 4	1993.05551	1993.05493	59	2+4 PP(37, 6)	36 5	1994.65502	1994.65456	47	
39	2+4 PP(46,21)	45 20	1993.06450	1993.06442	8	2+4 PP(36, 3)	35 2	1994.65502	1994.65574	-71	
40	2+4 RP(34,18)	33 19	1993.07527	1993.07553	-25	2+4 PP(38, 9)	37 8	1994.66199	1994.66135	64	
41	2+4 PP(47,24)	46 23	1993.08838	1993.08831	7	2+4 PP(39,12)	38 11	1994.67411	1994.67467	-55	
42	2+4 RP(37, 6)	36 7	1993.09665	1993.09629	37	2+4 RP(34, 3)	33 4	1994.68842	1994.68741	101	
43	2+4 PP(48,27)	47 26	1993.11437	1993.11463	-26	2+4 PP(40,15)	39 14	1994.69349	1994.69336	13	
44	2+4 PP(49,30)	48 29	1993.14265	1993.14289	-24	2+4 PP(41,18)	40 17	1994.71605	1994.71650	-45	
45	2+4 RP(36, 9)	35 10	1993.15456	1993.15568	-112	2+4 RP(33, 6)	32 7	1994.72320	1994.72334	-15	
46	2+4 PP(50,33)	49 32	1993.17275	1993.17269	7	2+4 PP(42,21)	41 20	1994.74272	1994.74330	-58	
47	2+4 PP(51,36)	50 35	1993.20414	1993.20364	50	2+4 PP(43,24)	42 23	1994.77277	1994.77311	-34	
48	2+4 PP(52,39)	51 38	1993.23580	1993.23543	37	2+4 PP(44,27)	43 26	1994.80518	1994.80536	-19	
49	2+4 RP(35,12)	34 13	1993.23580	1993.23577	3	2+4 PP(45,30)	44 29	1994.83795	1994.83958	-162	
50	2+4 PP(53,42)	52 41	1993.26825	1993.26779	46	2+4 RP(31,12)	30 13	1994.85285	1994.85157	128	
51	2+4 PP(54,45)	53 44	1993.30014	1993.30045	-32	2+4 PP(46,33)	45 32	1994.87549	1994.87533	16	
52	2+4 PP(55,48)	54 47	1993.32859W	1993.33321	-462	2+4 PP(47,36)	46 35	1994.91294	1994.91225	68	
53	2+4 RP(34,15)	33 16	1993.34367	1993.34209	158	2+4 PP(48,39)	47 38	1994.95084	1994.95004	80	
54	2+4 RP(38, 0)	37 1	1993.41941	1993.41766	175	2+4 RP(30,15)	29 16	1994.95084	1994.95255	-171	
55	2+4 PP(40, 6)	39 5	1993.41941	1993.41980	-38	2+4 PP(49,42)	48 41	1994.98931	1994.98840	91	
56	2+4 PP(41, 9)	40 8	1993.41941	1993.42220	-278	2+4 PP(50,45)	49 44	1995.02658	1995.02708	-50	
57	2+4 PP(39, 3)	38 2	1993.42621	1993.42541	79	2+4 RP(34, 0)	33 1	1995.05366	1995.05384	-17	
58	2+4 PP(43,15)	42 14	1993.44515	1993.44538	-23	2+4 PP(35, 3)	34 2	1995.06204	1995.06270	-66	
59	2+4 PP(44,18)	43 17	1993.46425	1993.46409	16	2+4 PP(36, 6)	35 5	1995.06204	1995.06301	-97	
60	2+4 RP(37, 3)	36 4	1993.46425	1993.46542	-117	2+4 PP(51,48)	50 47	1995.06204W	1995.06588	-384	
	2+4 PP(45,21)	44 20	1993.48636	1993.48646	-10	2+4 PP(37, 9)	36 8	1995.07099	1995.07128	-29	
	2+4 RP(36, 6)	35 7	1993.50618	1993.50545	72	2+4 PP(38,12)	37 11	1995.08665	1995.08607	59	
	2+4 PP(46,24)	45 23	1993.51086	1993.51183	-96	2+4 PP(39,15)	38 14	1995.10629	1995.10624	5	
	2+4 PP(47,27)	46 26	1993.53923	1993.53962	-39	2+4 PP(40,18)	39 17	1995.12956	1995.13086	-130	
	2+4 RP(35, 9)	34 10	1993.56261	1993.56340	-79	2+4 PP(41,21)	40 20	1995.15812	1995.15915	-103	
	2+4 PP(48,30)	47 29	1993.56926	1993.56937	-11	2+4 RP(31, 9)	30 10	1995.17785	1995.17824	-39	
	2+4 PP(49,33)	48 32	1993.60062	1993.60065	-3	2+4 PP(42,24)	41 23	1995.19007	1995.19045	-38	
	2+4 PP(50,36)	49 35	1993.63369	1993.63309	60	2+4 PP(43,27)	42 26	1995.22391	1995.22419	-28	
	2+4 RP(34,12)	33 13	1993.64087	1993.64213	-126	2+4 RP(30,12)	29 13	1995.25013	1995.25149	-136	
	2+4 PP(51,39)	50 38	1993.66719	1993.66638	81	2+4 PP(44,30)	43 29	1995.25994	1995.25990	5	
	2+4 PP(52,42)	51 41	1993.70124	1993.70023	101	2+4 PP(45,33)	44 32	1995.29729	1995.29715	14	
	2+4 PP(53,45)	52 44	1993.73241	1993.73440	-198	2+4 PP(46,36)	45 35	1995.33646	1995.33557	89	
	2+4 PP(54,48)	53 47	1993.76421W	1993.76866	-445	2+4 RP(29,15)	28 16	1995.34920	1995.35111	-191	
	2+4 RP(37, 0)	36 1	1993.82951	1993.82912	39	2+4 PP(47,39)	46 38	1995.37551	1995.37486	65	
	2+4 PP(40, 9)	39 8	1993.83614	1993.83681	-67	2+4 PP(48,42)	47 41	1995.41544	1995.41473	71	
	2+4 PP(38, 3)	37 2	1993.83614	1993.83709	-95	2+4 PP(49,45)	48 44	1995.45444	1995.45493	-49	
	2+4 PP(41,12)	40 11	1993.84766	1993.84718	48	2+4 RP(33, 0)	32 1	1995.45444W	1995.45885	-441	
	2+4 PP(42,15)	41 14	1993.86313	1993.86293	20	2+4 PP(34, 3)	33 2	1995.46926	1995.46809	117	
	2+4 RP(36, 3)	35 4	1993.87478	1993.87434	44	2+4 PP(35, 6)	34 5	1995.46926	1995.46988	-62	
	2+4 PP(43,18)	42 17	1993.88299	1993.88311	-12	2+4 PP(36, 9)	35 8	1995.48018	1995.47963	55	
	2+4 PP(44,21)	43 20	1993.90709	1993.90696	14	2+4 RP(32, 3)	31 4	1995.49534	1995.49412	122	
	2+4 RP(35, 6)	34 7	1993.91323	1993.91302	22	2+4 PP(37,12)	36 11	1995.49534	1995.49590	-56	

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	PP(38,15)	37	14	1995.51749	1995.51756	-7		2+4	PP(35,18)	34	17	1997.17924	1997.17926	-2					
2+4	RP(31, 6)	30	7	1995.52708	1995.52725	-17		2+4	PP(36,21)	35	20	1997.21454	1997.21503	-49					
2+4	PP(39,18)	38	17	1995.54347	1995.54366	-20		2+4	RP(25,12)	24	13	1997.22661	1997.22679	-18					
2+4	PP(40,21)	39	20	1995.57296	1995.57344	-48		2+4	PP(37,24)	36	23	1997.25336	1997.25382	-47					
2+4	PP(41,24)	40	23	1995.60587	1995.60623	-36		2+4	PP(38,27)	37	26	1997.29451	1997.29507	-56					
2+4	PP(42,27)	41	26	1995.64112	1995.64147	-35		2+4	PP(39,30)	38	29	1997.33791	1997.33829	-38					
2+4	RP(29,12)	28	13	1995.64823	1995.64979	-156		2+4	PP(40,33)	39	32	1997.38312	1997.38307	5					
2+4	PP(43,30)	42	29	1995.67861	1995.67867	-6		2+4	PP(41,36)	40	35	1997.42951	1997.42904	47					
2+4	PP(44,33)	43	32	1995.71822	1995.71742	80		2+4	RP(28, 0)	27	1	1997.46017	1997.45957	60					
2+4	PP(45,36)	44	35	1995.75802	1995.75735	67		2+4	PP(29, 3)	28	2	1997.47132	1997.47133	-1					
2+4	PP(46,39)	45	38	1995.79838	1995.79815	23		2+4	PP(42,39)	41	38	1997.47715	1997.47589	127					
2+4	PP(47,42)	46	41	1995.84004	1995.83952	52		2+4	PP(30, 6)	29	5	1997.48246	1997.48060	186					
2+4	RP(32, 0)	31	1	1995.86200	1995.86224	-23		2+4	RP(27, 3)	26	4	1997.48246	1997.48295	-49					
2+4	PP(33, 3)	32	2	1995.87423	1995.87190	233		2+4	PP(31, 9)	30	8	1997.49827	1997.49780	47					
2+4	PP(34, 6)	33	5	1995.87423	1995.87518	-95		2+4	RP(26, 6)	25	7	1997.50934	1997.50888	46					
2+4	PP(48,45)	47	44	1995.88076	1995.88124	-48		2+4	PP(32,12)	31	11	1997.52278	1997.52153	125					
2+4	PP(35, 9)	34	8	1995.88697	1995.88642	55		2+4	PP(43,42)	42	41	1997.52278	1997.52333	-54					
2+4	RP(31, 3)	30	4	1995.89520	1995.89508	12		2+4	PP(33,15)	32	14	1997.55067	1997.55066	1					
2+4	PP(36,12)	35	11	1995.90446	1995.90417	29		2+4	RP(25, 9)	24	10	1997.55067	1997.55225	-158					
2+4	RP(30, 6)	29	7	1995.92704	1995.92680	24		2+4	PP(34,18)	33	17	1997.58387	1997.58425	-38					
2+4	PP(37,15)	36	14	1995.92704	1995.92731	-27		2+4	PP(35,21)	34	20	1997.62114	1997.62152	-39					
2+4	PP(38,18)	37	17	1995.95469	1995.95491	-21		2+4	PP(36,24)	35	23	1997.66126	1997.66182	-56					
2+4	RP(29, 9)	28	10	1995.97603	1995.97603	0		2+4	PP(37,27)	36	26	1997.70436	1997.70458	-22					
2+4	PP(39,21)	38	20	1995.98564	1995.98618	-54		2+4	PP(38,30)	37	29	1997.74920	1997.74931	-12					
2+4	PP(40,24)	39	23	1996.01985	1996.02046	-62		2+4	PP(39,33)	38	32	1997.79570	1997.79561	10					
2+4	RP(28,12)	27	13	1996.04530	1996.04647	-117		2+4	PP(40,36)	39	35	1997.84340	1997.84309	30					
2+4	PP(41,27)	40	26	1996.05709	1996.05720	-11		2+4	RP(27, 0)	26	1	1997.85539	1997.85483	56					
2+4	PP(42,30)	41	29	1996.09596	1996.09590	6		2+4	PP(28, 3)	27	2	1997.86746	1997.86722	24					
2+4	PP(43,33)	42	32	1996.13638	1996.13616	22		2+4	RP(26, 3)	25	4	1997.87743	1997.87591	152					
2+4	PP(44,36)	43	35	1996.17798	1996.17759	39		2+4	PP(29, 6)	28	5	1997.87743	1997.87800	-57					
2+4	PP(45,39)	44	38	1996.22053	1996.21990	63		2+4	PP(41,39)	40	38	1997.89225	1997.89146	80					
2+4	PP(46,42)	45	41	1996.26364	1996.26279	86		2+4	PP(30, 9)	29	8	1997.89818	1997.89670	148					
2+4	RP(31, 0)	30	1	1996.26364	1996.26401	-36		2+4	PP(31,12)	30	11	1997.92179	1997.92194	-14					
2+4	PP(32, 3)	31	2	1996.27486	1996.27414	73		2+4	PP(42,42)	41	41	1997.94107	1997.94042	65					
2+4	PP(33, 6)	32	5	1996.27950	1996.27891	59		2+4	RP(24, 9)	23	10	1997.94107	1997.94226	-120					
2+4	PP(34, 9)	33	8	1996.29234	1996.29163	72		2+4	PP(32,15)	31	14	1997.95231	1997.95257	-26					
2+4	PP(47,45)	46	44	1996.30552	1996.30601	-50		2+4	PP(33,18)	32	17	1997.98743	1997.98767	-24					
2+4	PP(35,12)	34	11	1996.31140	1996.31087	54		2+4	PP(34,21)	33	20	1998.02617	1998.02645	-28					
2+4	RP(29, 6)	28	7	1996.32317	1996.32474	-156		2+4	PP(35,24)	34	23	1998.06780	1998.06826	-46					
2+4	PP(36,15)	35	14	1996.33581	1996.33550	31		2+4	PP(36,27)	35	26	1998.11203	1998.11253	-50					
2+4	PP(37,18)	36	17	1996.36398	1996.36459	-61		2+4	PP(37,30)	36	29	1998.15860	1998.15878	-18					
2+4	RP(28, 9)	27	10	1996.37307	1996.37251	56		2+4	PP(38,33)	37	32	1998.20686	1998.20659	27					
2+4	PP(38,21)	37	20	1996.39705	1996.39736	-31		2+4	RP(26, 0)	25	1	1998.24924	1998.24847	76					
2+4	PP(39,24)	38	23	1996.43207	1996.43314	-107		2+4	PP(39,36)	38	35	1998.25615	1998.25559	56					
2+4	PP(40,27)	39	26	1996.47080	1996.47138	-58		2+4	PP(27, 3)	26	2	1998.26209	1998.26152	57					
2+4	PP(41,30)	40	29	1996.51136	1996.51158	-22		2+4	RP(25, 3)	24	4	1998.26794	1998.26726	68					
2+4	PP(42,33)	41	32	1996.55300	1996.55334	-34		2+4	PP(28, 6)	27	5	1998.27382	1998.27381	1					
2+4	PP(43,36)	42	35	1996.59658	1996.59629	29		2+4	RP(24, 6)	23	7	1998.28986	1998.29025	-38					
2+4	PP(44,39)	43	38	1996.64092	1996.64010	82		2+4	PP(29, 9)	28	8	1998.29518	1998.29402	116					
2+4	RP(30, 0)	29	1	1996.66486	1996.66415	71		2+4	PP(40,39)	39	38	1998.30616	1998.30548	68					
2+4	PP(31, 3)	30	2	1996.67518	1996.67479	40		2+4	PP(30,12)	29	11	1998.32080	1998.32076	4					
2+4	PP(32, 6)	31	5	1996.68318	1996.68106	212		2+4	RP(23, 9)	22	10	1998.32996	1998.33065	-69					
2+4	PP(45,42)	44	41	1996.68318	1996.68451	-133		2+4	PP(31,15)	30	14	1998.35288	1998.35290	-2					
2+4	PP(33, 9)	32	8	1996.69447	1996.69526	-80		2+4	PP(32,18)	31	17	1998.38915	1998.38951	-36					
2+4	PP(34,12)	33	11	1996.71605	1996.71600	6		2+4	PP(33,21)	32	20	1998.42922	1998.42981	-58					
2+4	RP(28, 6)	27	7	1996.72135	1996.72106	29		2+4	PP(34,24)	33	23	1998.47273	1998.47313	-40					
2+4	PP(46,45)	45	44	1996.72849	1996.72926	-76		2+4	PP(35,27)	34	26	1998.51864	1998.51892	-28					
2+4	PP(35,15)	34	14	1996.74196	1996.74212	-17		2+4	PP(36,30)	35	29	1998.56652	1998.56668	-16					
2+4	RP(27, 9)	26	10	1996.76698	199														

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
2+4 PP(25, 3)	24	2	1999.04529	1999.04534	-4	2+4 PP(27, 24)	26	23	2001.26279	2001.26323	-44
2+4 PP(26, 6)	25	5	1999.06107	1999.06066	41	2+4 PP(28, 27)	27	26	2001.31937	2001.31971	-34
2+4 PP(37, 36)	36	35	1999.07642	1999.07593	49	2+4 RP(18, 0)	17	1	2001.33934	2001.33863	71
2+4 PP(27, 9)	26	8	1999.08516	1999.08389	126	2+4 RP(17, 3)	16	4	2001.33934	2001.34002	-67
2+4 RP(21, 9)	20	10	1999.10247	1999.10256	-9	2+4 RP(16, 6)	15	7	2001.35155	2001.35089	66
2+4 PP(28, 12)	27	11	1999.11359	1999.11366	-7	2+4 PP(19, 3)	18	2	2001.35872	2001.35839	33
2+4 PP(29, 15)	28	14	1999.14869	1999.14883	-14	2+4 PP(20, 6)	19	5	2001.38290	2001.38290	0
2+4 PP(30, 18)	29	17	1999.18775	1999.18848	-72	2+4 PP(21, 9)	20	8	2001.41774	2001.41532	242
2+4 PP(31, 21)	30	20	1999.23136	1999.23181	-44	2+4 PP(22, 12)	21	11	2001.45422	2001.45427	-4
2+4 PP(32, 24)	31	23	1999.27767	1999.27817	-49	2+4 PP(23, 15)	22	14	2001.49824	2001.49862	-38
2+4 PP(33, 27)	32	26	1999.32665	1999.32699	-35	2+4 PP(24, 18)	23	17	2001.54707	2001.54744	-37
2+4 PP(34, 30)	33	29	1999.37765	1999.37780	-15	2+4 PP(25, 21)	24	20	2001.59956	2001.59996	-40
2+4 RP(23, 0)	22	1	1999.41995	1999.41958	38	2+4 PP(26, 24)	25	23	2001.65507	2001.65551	-44
2+4 PP(35, 33)	34	32	1999.43056	1999.43018	38	2+4 PP(27, 27)	26	26	2001.71318	2001.71352	-34
2+4 RP(22, 3)	21	4	1999.43056	1999.43166	-110	2+4 PP(18, 3)	17	2	2001.73851	2001.73827	24
2+4 PP(25, 6)	24	5	1999.45156	1999.45169	-14	2+4 PP(19, 6)	18	5	2001.76450	2001.76434	16
2+4 PP(26, 9)	25	8	1999.47813	1999.47645	168	2+4 PP(20, 9)	19	8	2001.80101	2001.79830	271
2+4 PP(36, 36)	35	35	1999.48434	1999.48376	58	2+4 PP(21, 12)	20	11	2001.83878	2001.83879	-2
2+4 RP(20, 9)	19	10	1999.48434	1999.48608	-174	2+4 PP(22, 15)	21	14	2001.88425	2001.88469	-43
2+4 PP(27, 12)	26	11	1999.50765	1999.50774	-8	2+4 PP(23, 18)	22	17	2001.93423	2001.93505	-82
2+4 PP(28, 15)	27	14	1999.54400	1999.54443	-42	2+4 PP(24, 21)	23	20	2001.98873	2001.98911	-39
2+4 PP(29, 18)	28	17	1999.58539	1999.58559	-20	2+4 PP(25, 24)	24	23	2002.04537	2002.04620	-83
2+4 PP(30, 21)	29	20	1999.62999	1999.63045	-46	2+4 RP(16, 0)	15	1	2002.09443	2002.09474	-31
2+4 PP(31, 24)	30	23	1999.67780	1999.67833	-53	2+4 PP(17, 3)	16	2	2002.11540	2002.11655	-115
2+4 PP(32, 27)	31	26	1999.72821	1999.72868	-48	2+4 PP(18, 6)	17	5	2002.14436	2002.14417	19
2+4 PP(33, 30)	32	29	1999.78093	1999.78102	-9	2+4 PP(19, 9)	18	8	2002.18215	2002.17968	247
2+4 RP(22, 0)	21	1	1999.80645	1999.80667	-22	2+4 RQ(60, 30)	60	31	2002.22141	2002.21963	178
2+4 RP(21, 3)	20	4	1999.81687	1999.81657	30	2+4 PP(20, 12)	19	11	2002.22141	2002.22172	-30
2+4 PP(23, 3)	22	2	1999.82303	1999.82276	27	2+4 PP(21, 15)	20	14	2002.26901	2002.26916	-15
2+4 PP(34, 33)	33	32	1999.83502	1999.83492	10	2+4 PP(22, 18)	21	17	2002.32085	2002.32107	-22
2+4 PP(24, 6)	23	5	1999.84115	1999.84113	2	2+4 PP(23, 21)	22	20	2002.37594	2002.37668	-74
2+4 PP(25, 9)	24	8	1999.86880	1999.86741	138	2+4 RQ(59, 27)	59	28	2002.39288	2002.39321	-34
2+4 RP(19, 9)	18	10	1999.86880	1999.86796	83	2+4 PP(24, 24)	23	23	2002.43486	2002.43531	-45
2+4 PP(26, 12)	25	11	1999.90026	1999.90022	3	2+4 RP(14, 3)	13	4	2002.46552	2002.46557	-5
2+4 PP(27, 15)	26	14	1999.93818	1999.93844	-27	2+4 RP(15, 0)	14	1	2002.47084	2002.47032	51
2+4 PP(28, 18)	27	17	1999.98068	1999.98113	-45	2+4 RP(13, 6)	12	7	2002.47084	2002.47179	-95
2+4 PP(29, 21)	28	20	2000.02701	2000.02751	-50	2+4 PP(16, 3)	15	2	2002.49390	2002.49322	68
2+4 PP(30, 24)	29	23	2000.07662	2000.07692	-30	2+4 RQ(58, 27)	58	28	2002.49390	2002.49410	-21
2+4 PP(31, 27)	30	26	2000.12811	2000.12880	-69	2+4 PP(17, 6)	16	5	2002.52213	2002.52239	-26
2+4 PP(32, 30)	31	29	2000.18244	2000.18266	-22	2+4 RQ(59, 24)	59	25	2002.53024	2002.53056	-32
2+4 RP(21, 0)	20	1	2000.19327	2000.19213	114	2+4 PP(18, 9)	17	8	2002.55628W	2002.55946	-317
2+4 RP(20, 3)	19	4	2000.20026	2000.19986	40	2+4 PP(19, 12)	18	11	2002.60314	2002.60305	9
2+4 PP(22, 3)	21	2	2000.20885	2000.20907	-23	2+4 RQ(60, 21)	60	22	2002.62416	2002.62410	6
2+4 RP(19, 6)	18	7	2000.21571	2000.21533	38	2+4 RQ(56, 30)	56	31	2002.62416	2002.62454	-38
2+4 PP(23, 6)	22	5	2000.22897	2000.22898	0	2+4 RQ(58, 24)	58	25	2002.63124	2002.63043	81
2+4 PP(33, 33)	32	32	2000.23809	2000.23810	-1	2+4 PP(20, 15)	19	14	2002.65184	2002.65204	-19
2+4 RP(18, 9)	17	10	2000.24846	2000.24822	24	2+4 RQ(56, 27)	56	28	2002.69118	2002.69090	28
2+4 PP(24, 9)	23	8	2000.25844	2000.25678	166	2+4 PP(21, 18)	20	17	2002.70536	2002.70550	-14
2+4 PP(25, 12)	24	11	2000.29125	2000.29112	13	2+4 RQ(55, 30)	55	31	2002.72140	2002.72158	-18
2+4 PP(26, 15)	25	14	2000.33082	2000.33087	-4	2+4 RQ(57, 24)	57	25	2002.72970	2002.72866	104
2+4 PP(27, 18)	26	17	2000.37473	2000.37509	-36	2+4 PP(22, 21)	21	20	2002.76228	2002.76265	-37
2+4 PP(28, 21)	27	20	2000.42249	2000.42300	-51	2+4 RQ(54, 30)	54	31	2002.81686	2002.81694	-8
2+4 PP(29, 24)	28	23	2000.47352	2000.47394	-42	2+4 RQ(58, 21)	58	22	2002.82364	2002.82378	-14
2+4 PP(30, 27)	29	26	2000.52687	2000.52734	-47	2+4 RP(13, 3)	12	4	2002.83760	2002.83751	10
2+4 RP(20, 0)	19	1	2000.57586	2000.57594	-8	2+4 RP(14, 0)	13	1	2002.84395	2002.84425	-30
2+4 RP(19, 3)	18	4	2000.58246	2000.58153	94	2+4 PP(15, 3)	14	2	2002.86835	2002.86827	8
2+4 PP(31, 30)	30	29	2000.58246	2000.58274	-27	2+4 RQ(54, 27)	54	28	2002.88249	2002.88105	145
2+4 PP(21, 3)	20	2	2000.59426	2000.59378	47	2+4 PP(16, 6)	15	5	2002.89943	2002.89900	43
2+4 RP(18, 6)	17	7	2000.59426	2000.59547	-122	2+4 RQ(55, 24)	55	25	2002.92081	2002.92018	63
2+4 PP(22, 6)	21	5	2000.61542	2000.61522	20	2+4 RQ(57, 21)	57	22	2002.92081	2002.92117	-36
2+4 RP(17, 9)	16	10	2000.62677	2000.62684	-7	2+4 PP(17, 9)	16	8	2002.93584	2002.93762	-179
2+4 PP(23, 9)	22	8	2000.64618	2000.64456	162	2+4 RQ(59, 18)	59	19	2002.96690	2002.96591	100
2+4 PP(24, 12)	23	11	2000.68033	2000.68043	-11	2+4 RQ(53, 27)	53	28	2002.97475	2002.97362	114
2+4 PP(25, 15)	24	14	2000.72140	2000.72171	-31	2+4 PP(18, 12)	17	11	2002.98265	2002.98277	-12
2+4 PP(26, 18)	25	17	2000.76710	2000.76746	-36	2+4 RQ(52, 30)	52	31	2003.00156	2003.00258	-103
2+4 PP(27, 21)	26	20	2000.81635	2000.81690	-55	2+4 RQ(54, 24)	54	25	2003.01598	2003.01345	253
2+4 PP(28, 24)	27	23	2000.86908	2000.86937	-29	2+4 RQ(56, 21)	56	22	2003.01598	2003.01692	-94
2+4 PP(29, 27)	28	26	2000.92407	2000.92431	-24	2+4 PP(19, 15)	18	14	2003.03312	2003.03332	-20
2+4 RP(19, 0)	18	1	2000.95921	2000.95811	110	2+4 RQ(58, 18)	58	19	2003.06353	2003.06422	-70
2+4 RP(18, 3)	17	4	2000.95921	2000.96158	-238	2+4 RQ(52, 27)	52	28	2003.06353	2003.06452	-99
2+4 PP(20, 3)	19	2	2000.97982	2000.97689	293	2+4 PP(20, 18)	19	17	2003.08782	2003.08833	-51
2+4 PP(30, 30)	29	29	2000.97982	2000.98124	-142	2+4 RQ(53, 24)	53	25	2003.10583	2003.10508	75
2+4 PP(21, 6)	20	5	2000.99989	2000.99986	3	2+4 RQ(55, 21)	55	22	2003.11077	2003.11103	-27
2+4 PP(22, 9)	21	8	2001.03246	2001.03074	172	2+4 RQ(60, 15)	60	16	2003.14635	2003.14606	28
2+4 PP(23, 12)	22	11	2001.06807	2001.06815	-8	2+4 PP(21, 21)	20	20	2003.14635	2003.14703	-69
2+4 PP(24, 15)	23	14	2001.11077	2001.11096	-18	2+4 RQ(57, 18)	57	19	2003.16053	2003.16091	-38
2+4 PP(25, 18)	24	17	2001.15759	2001.15824	-66	2+4 RQ(52, 24)	52	25	2003.19637	2003.19504	133
2+4 PP(26, 21)	25	20	2001.20880	2001.20922	-42	2+4 RQ(54, 21)	54	22	2003.20344	2003.20350	-6

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RP(13, 0)	12 1	2003.21722	2003.21653	70	2+4 PP(14, 9)	13 8	2004.06197	2004.06248	-52
2+4 RQ(50,27)	50 28	2003.24205	2003.24129	76	2+4 RQ(50,15)	50 16	2004.06783	2004.06653	130
2+4 PP(14, 3)	13 2	2003.24205	2003.24170	35	2+4 RQ(41,24)	41 25	2004.07470	2004.07467	3
2+4 RQ(56,18)	56 19	2003.25612	2003.25597	15	2+4 RQ(57, 9)	57 10	2004.08496	2004.08497	-1
2+4 RQ(49,30)	49 31	2003.26861	2003.26837	24	2+4 RQ(39,27)	39 28	2004.09495	2004.09307	188
2+4 PP(15, 6)	14 5	2003.27414	2003.27400	14	2+4 RQ(38,30)	38 31	2004.11243	2004.11166	77
2+4 RQ(51,24)	51 25	2003.28463	2003.28335	128	2+4 RQ(43,21)	43 22	2004.11243	2004.11172	70
2+4 RQ(53,21)	53 22	2003.29401	2003.29433	-31	2+4 PP(15,12)	14 11	2004.11243	2004.11232	10
2+4 PP(16, 9)	15 8	2003.31261	2003.31419	-158	2+4 RQ(40,24)	40 25	2004.14384	2004.14458	-75
2+4 RQ(49,27)	49 28	2003.32728	2003.32716	12	2+4 RQ(38,27)	38 28	2004.16171	2004.16033	137
2+4 RQ(58,15)	58 16	2003.34131	2003.34315	-184	2+4 PP(16,15)	15 14	2004.16744	2004.16755	-11
2+4 RQ(55,18)	55 19	2003.35094	2003.34940	154	2+4 RQ(37,30)	37 31	2004.17864	2004.17802	61
2+4 PP(17,12)	16 11	2003.36102	2003.36089	13	2+4 RQ(56, 9)	56 10	2004.17864	2004.17854	10
2+4 RQ(50,24)	50 25	2003.37072	2003.36999	73	2+4 RQ(42,21)	42 22	2004.18473	2004.18434	39
2+4 RQ(52,21)	52 22	2003.38401	2003.38351	50	2+4 RQ(45,18)	45 19	2004.19307	2004.19359	-52
2+4 RQ(48,27)	48 28	2003.41266	2003.41135	131	2+4 RQ(52,12)	52 13	2004.20244	2004.20296	-52
2+4 PP(18,15)	17 14	2003.41266	2003.41300	-34	2+4 RQ(39,24)	39 25	2004.21225	2004.21282	-56
2+4 RQ(47,30)	47 31	2003.43916	2003.43707	209	2+4 RQ(37,27)	37 28	2004.22603	2004.22590	13
2+4 RQ(57,15)	57 16	2003.43916	2003.43926	-10	2+4 RQ(48,15)	48 16	2004.23049	2004.23107	-58
2+4 RQ(49,24)	49 25	2003.45531	2003.45497	34	2+4 RQ(36,30)	36 31	2004.24254	2004.24267	-13
2+4 RQ(60,12)	60 13	2003.45531	2003.45736	-205	2+4 RQ(41,21)	41 22	2004.25582	2004.25529	53
2+4 PP(19,18)	18 17	2003.46937	2003.46957	-20	2+4 RQ(44,18)	44 19	2004.26884	2004.26896	-11
2+4 RQ(51,21)	51 22	2003.46937	2003.47104	-167	2+4 RQ(55, 9)	55 10	2004.26884	2004.27050	-166
2+4 RQ(47,27)	47 28	2003.49457	2003.49386	71	2+4 RQ(38,24)	38 25	2004.28040	2004.27936	103
2+4 RQ(53,18)	53 19	2003.53294	2003.53136	157	2+4 RQ(51,12)	51 13	2004.29000	2004.28887	112
2+4 RQ(56,15)	56 16	2003.53294	2003.53375	-81	2+4 RQ(36,27)	36 28	2004.29000	2004.28975	24
2+4 RQ(48,24)	48 25	2003.53979	2003.53829	151	2+4 RP(9, 3)	8 4	2004.30861	2004.30894	-32
2+4 RQ(59,12)	59 13	2003.55650	2003.55621	29	2+4 RP(10, 0)	9 1	2004.32434	2004.32342	93
2+4 RQ(50,21)	50 22	2003.55650	2003.55692	-42	2+4 RQ(40,21)	40 22	2004.32434	2004.32457	-22
2+4 RQ(46,27)	46 28	2003.57657	2003.57468	189	2+4 RQ(43,18)	43 19	2004.34171	2004.34267	-96
2+4 RP(11, 3)	10 4	2003.57657	2003.57649	9	2+4 RQ(35,27)	35 28	2004.35288	2004.35191	97
2+4 RP(12, 0)	11 1	2003.58770	2003.58715	56	2+4 PP(11, 3)	10 2	2004.35288	2004.35230	58
2+4 RQ(45,30)	45 31	2003.59912	2003.59896	15	2+4 RQ(54, 9)	54 10	2004.36125	2004.36085	40
2+4 PP(13, 3)	12 2	2003.61407	2003.61352	55	2+4 RQ(50,12)	50 13	2004.37248	2004.37316	-68
2+4 RQ(52,18)	52 19	2003.62009	2003.61989	20	2+4 RQ(46,15)	46 16	2004.38946	2004.38907	40
2+4 RQ(47,24)	47 25	2003.62009	2003.61993	16	2+4 PP(12, 6)	11 5	2004.38946	2004.38932	14
2+4 RQ(55,15)	55 16	2003.62772	2003.62662	110	2+4 RQ(39,21)	39 22	2004.38946	2004.39218	-271
2+4 RQ(49,21)	49 22	2003.64143	2003.64115	28	2+4 RQ(36,24)	36 25	2004.40894	2004.40740	154
2+4 PP(14, 6)	13 5	2003.64774	2003.64739	35	2+4 RQ(34,27)	34 28	2004.41445	2004.41235	210
2+4 RQ(58,12)	58 13	2003.65456	2003.65345	111	2+4 RQ(42,18)	42 19	2004.41445	2004.41473	-28
2+4 RQ(45,27)	45 28	2003.65456	2003.65381	75	2+4 PP(13, 9)	12 8	2004.43342	2004.43422	-80
2+4 RQ(44,30)	44 31	2003.67718	2003.67734	-16	2+4 RQ(53, 9)	53 10	2004.44991	2004.44959	31
2+4 PP(15, 9)	14 8	2003.68829	2003.68914	-85	2+4 RQ(49,12)	49 13	2004.45695	2004.45582	113
2+4 RQ(46,24)	46 25	2003.70079	2003.69991	88	2+4 RQ(38,21)	38 22	2004.45695	2004.45812	-116
2+4 RQ(51,18)	51 19	2003.70686	2003.70678	8	2+4 RQ(45,15)	45 16	2004.46818	2004.46560	257
2+4 RQ(54,15)	54 16	2003.71800	2003.71786	14	2+4 RQ(35,24)	35 25	2004.46818	2004.46889	-71
2+4 RQ(48,21)	48 22	2003.72415	2003.72372	43	2+4 RQ(41,18)	41 19	2004.48519	2004.48514	4
2+4 RQ(44,27)	44 28	2003.73156	2003.73126	30	2+4 PP(14,12)	13 11	2004.48519	2004.48562	-44
2+4 PP(16,12)	15 11	2003.73760	2003.73741	19	2+4 RQ(37,21)	37 22	2004.52332	2004.52239	93
2+4 RQ(57,12)	57 13	2003.74933	2003.74908	25	2+4 RQ(32,27)	32 28	2004.52914	2004.52811	103
2+4 PP(17,15)	16 14	2003.79086	2003.79108	-22	2+4 RQ(34,24)	34 25	2004.52914	2004.52868	46
2+4 RQ(47,21)	47 22	2003.80565	2003.80464	101	2+4 RQ(52, 9)	52 10	2004.53666	2004.53672	-6
2+4 RQ(43,27)	43 28	2003.80565	2003.80701	-136	2+4 RQ(48,12)	48 13	2004.53666	2004.53685	-19
2+4 RQ(42,30)	42 31	2003.82859	2003.82898	-39	2+4 RQ(44,15)	44 16	2004.54200	2004.54050	150
2+4 PP(18,18)	17 17	2003.84920	2003.84921	-1	2+4 PP(15,15)	14 14	2004.54200	2004.54242	-43
2+4 RQ(49,18)	49 19	2003.87499	2003.87563	-64	2+4 RQ(40,18)	40 19	2004.55318	2004.55389	-71
2+4 RQ(42,27)	42 28	2003.88239	2003.88107	132	2+4 RQ(31,27)	31 28	2004.58502	2004.58342	160
2+4 RQ(46,21)	46 22	2003.88239	2003.88390	-151	2+4 RQ(36,21)	36 22	2004.58502	2004.58498	4
2+4 RQ(52,15)	52 16	2003.89407	2003.89546	-139	2+4 RQ(33,24)	33 25	2004.58502	2004.58678	-177
2+4 RQ(41,30)	41 31	2003.90315	2003.90223	92	2+4 RQ(43,15)	43 16	2004.61517	2004.61375	143
2+4 RQ(43,24)	43 25	2003.92980	2003.92980	1	2+4 RQ(47,12)	47 13	2004.61517	2004.61625	-108
2+4 RQ(55,12)	55 13	2003.93606	2003.93549	57	2+4 RQ(39,18)	39 19	2004.62117	2004.62099	18
2+4 RP(10, 3)	9 4	2003.94219	2003.94353	-133	2+4 RQ(51, 9)	51 10	2004.62117	2004.62224	-107
2+4 RQ(41,27)	41 28	2003.95650W	2003.95343	307	2+4 RQ(30,27)	30 28	2004.63826	2004.63702	125
2+4 RP(11, 0)	10 1	2003.95650	2003.95611	39	2+4 RQ(32,24)	32 25	2004.64544	2004.64319	225
2+4 RQ(48,18)	48 19	2003.95650	2003.95759	-109	2+4 RQ(35,21)	35 22	2004.64544	2004.64590	-46
2+4 RQ(45,21)	45 22	2003.96174	2003.96150	23	2+4 RQ(42,15)	42 16	2004.68555	2004.68535	20
2+4 RQ(40,30)	40 31	2003.97455	2003.97375	79	2+4 RQ(38,18)	38 19	2004.68555	2004.68642	-87
2+4 RQ(51,15)	51 16	2003.98240	2003.98181	59	2+4 RQ(46,12)	46 13	2004.69420	2004.69402	18
2+4 PP(12, 3)	11 2	2003.98240	2003.98372	-132	2+4 RQ(31,24)	31 25	2004.70016	2004.69790	226
2+4 RQ(58, 9)	58 10	2003.99092	2003.98980	112	2+4 RQ(34,21)	34 22	2004.70553	2004.70514	39
2+4 RQ(42,24)	42 25	2004.00347	2004.00307	40	2+4 RQ(50, 9)	50 10	2004.70553	2004.70614	-61
2+4 PP(13, 6)	12 5	2004.01942	2004.01916	26	2+4 PP(10, 3)	9 2	2004.72014	2004.71925	89
2+4 RQ(40,27)	40 28	2004.02561	2004.02410	151	2+4 RQ(37,18)	37 19	2004.75030	2004.75019	11
2+4 RQ(54,12)	54 13	2004.02561	2004.02627	-66	2+4 RQ(30,24)	30 25	2004.75030	2004.75092	-62
2+4 RQ(44,21)	44 22	2004.03735	2004.03745	-10	2+4 RQ(41,15)	41 16	2004.75672	2004.75531	140
2+4 RQ(47,18)	47 19	2004.03735	2004.03790	-55	2+4 PP(11, 6)	10 5	2004.75672	2004.75786	-114
2+4 RQ(39,30)	39 31	2004.04378	2004.04357	21	2+4 RQ(45,12)	45 13	2004.77015	2004.77016	-1

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)		
2+4 RQ(29,24)	29	25	2004.80365	2004.80224	142	2+4 RQ(39, 9)	39	10	2005.52347	2005.52187	161
2+4 PP(12, 9)	11	8	2004.80365	2004.80433	-68	2+4 RQ(54, 0)	54	1	2005.52347	2005.52394	-47
2+4 RQ(36,18)	36	19	2004.81196	2004.81230	-34	2+4 PP(10, 9)	9	8	2005.53959	2005.53972	-14
2+4 RQ(32,21)	32	22	2004.81999	2004.81859	140	2+4 RQ(33,12)	33	13	2005.55533	2005.55594	-61
2+4 RQ(40,15)	40	16	2004.81999W	2004.82363	-364	2+4 RQ(27,15)	27	16	2005.56094	2005.56123	-29
2+4 RQ(44,12)	44	13	2004.84452	2004.84466	-14	2+4 RQ(38, 9)	38	10	2005.58619	2005.58624	-6
2+4 PP(13,12)	12	11	2004.85728	2004.85732	-4	2+4 RQ(48, 3)	48	4	2005.59426	2005.59415	11
2+4 RQ(35,18)	35	19	2004.87165	2004.87275	-110	2+4 RQ(43, 6)	43	7	2005.59955	2005.59896	59
2+4 RQ(31,21)	31	22	2004.87165	2004.87280	-115	2+4 RQ(26,15)	26	16	2005.60597	2005.60636	-39
2+4 RQ(39,15)	39	16	2004.88908	2004.89029	-121	2+4 RQ(53, 0)	53	1	2005.61042	2005.61016	27
2+4 RQ(27,24)	27	25	2004.90224	2004.89978	247	2+4 RQ(32,12)	32	13	2005.61042	2005.61073	-31
2+4 RQ(43,12)	43	13	2004.91678	2004.91753	-74	2+4 RQ(19,18)	19	19	2005.61042	2005.61278	-236
2+4 RQ(30,21)	30	22	2004.92496	2004.92532	-36	2+4 RQ(37, 9)	37	10	2005.64896	2005.64898	-2
2+4 RQ(34,18)	34	19	2004.93165	2004.93153	12	2+4 RQ(25,15)	25	16	2005.64896	2005.64982	-86
2+4 RQ(26,24)	26	25	2004.94790	2004.94600	190	2+4 RQ(31,12)	31	13	2005.66368	2005.66388	-19
2+4 RQ(47, 9)	47	10	2004.94790	2004.94812	-22	2+4 RQ(42, 6)	42	7	2005.67038	2005.66978	60
2+4 RQ(38,15)	38	16	2004.95497	2004.95531	-34	2+4 RQ(47, 3)	47	4	2005.67038	2005.67265	-227
2+4 RQ(29,21)	29	22	2004.97382	2004.97617	-234	2+4 RQ(24,15)	24	16	2005.69191	2005.69162	29
2+4 RQ(33,18)	33	19	2004.98836	2004.98865	-30	2+4 RQ(52, 0)	52	1	2005.69191	2005.69481	-290
2+4 RQ(42,12)	42	13	2004.98836	2004.98875	-40	2+4 RQ(36, 9)	36	10	2005.71012	2005.71009	3
2+4 RQ(37,15)	37	16	2005.01867	2005.01867	0	2+4 RQ(30,12)	30	13	2005.71492	2005.71537	-45
2+4 RQ(28,21)	28	22	2005.02531	2005.02532	-1	2+4 RQ(23,15)	23	16	2005.72997	2005.73175	-178
2+4 RQ(46, 9)	46	10	2005.02531	2005.02554	-23	2+4 RQ(41, 6)	41	7	2005.73888	2005.73896	-7
2+4 RQ(32,18)	32	19	2005.04332	2005.04410	-78	2+4 RQ(46, 3)	46	4	2005.74971	2005.74954	17
2+4 RQ(50, 6)	50	7	2005.05752	2005.05714	38	2+4 RQ(29,12)	29	13	2005.76492	2005.76520	-28
2+4 RQ(41,12)	41	13	2005.05752	2005.05834	-83	2+4 RQ(35, 9)	35	10	2005.76945	2005.76955	-10
2+4 RQ(27,21)	27	22	2005.07283	2005.07280	4	2+4 RQ(22,15)	22	16	2005.76945	2005.77022	-77
2+4 RQ(36,15)	36	16	2005.07960	2005.08038	-78	2+4 RP(6, 0)	5	1	2005.77779	2005.77604	175
2+4 PP(9, 3)	8	2	2005.08540	2005.08458	82	2+4 RQ(51, 0)	51	1	2005.77779	2005.77788	-10
2+4 RQ(54, 3)	54	4	2005.09130	2005.08940	190	2+4 RQ(40, 6)	40	7	2005.80675	2005.80649	26
2+4 RQ(31,18)	31	19	2005.09919	2005.09788	131	2+4 RQ(21,15)	21	16	2005.80675	2005.80701	-26
2+4 RQ(45, 9)	45	10	2005.09919	2005.10133	-213	2+4 PP(7, 3)	6	2	2005.81251	2005.81037	214
2+4 RQ(26,21)	26	22	2005.11890	2005.11858	32	2+4 RQ(28,12)	28	13	2005.81251	2005.81339	-88
2+4 PP(10, 6)	9	5	2005.12523	2005.12478	45	2+4 RQ(45, 3)	45	4	2005.82629	2005.82481	148
2+4 RQ(40,12)	40	13	2005.12523	2005.12630	-107	2+4 RQ(34, 9)	34	10	2005.82629	2005.82738	-108
2+4 RQ(49, 6)	49	7	2005.13974	2005.13948	26	2+4 RQ(20,15)	20	16	2005.84156	2005.84215	-59
2+4 RQ(35,15)	35	16	2005.13974	2005.14044	-70	2+4 PP(8, 6)	7	5	2005.85422	2005.85375	47
2+4 RQ(30,18)	30	19	2005.14940	2005.15000	-60	2+4 RQ(50, 0)	50	1	2005.85980	2005.85939	41
2+4 RQ(25,21)	25	22	2005.16386	2005.16268	118	2+4 RQ(27,12)	27	13	2005.85980	2005.85992	-12
2+4 PP(11, 9)	10	8	2005.17321	2005.17284	37	2+4 RQ(39, 6)	39	7	2005.87289	2005.87238	51
2+4 RQ(44, 9)	44	10	2005.17321	2005.17549	-229	2+4 RQ(19,15)	19	16	2005.87289	2005.87561	-272
2+4 RQ(53, 3)	53	4	2005.17321W	2005.17754	-433	2+4 RQ(33, 9)	33	10	2005.88300	2005.88356	-56
2+4 RQ(39,12)	39	13	2005.19177	2005.19261	-84	2+4 RQ(44, 3)	44	4	2005.89893	2005.89847	46
2+4 RQ(34,15)	34	16	2005.19883	2005.19884	-1	2+4 RQ(26,12)	26	13	2005.90505	2005.90480	25
2+4 RQ(29,18)	29	19	2005.19883	2005.20044	-160	2+4 PP(9, 9)	8	8	2005.90505	2005.90499	6
2+4 RQ(24,21)	24	22	2005.20650	2005.20509	140	2+4 RQ(18,15)	18	16	2005.90505	2005.90740	-235
2+4 RQ(48, 6)	48	7	2005.22065	2005.22018	47	2+4 RQ(38, 6)	38	7	2005.93750	2005.93662	87
2+4 PP(12,12)	11	11	2005.22732	2005.22740	-8	2+4 RQ(32, 9)	32	10	2005.93750	2005.93810	-61
2+4 RQ(43, 9)	43	10	2005.24832	2005.24803	29	2+4 RQ(49, 0)	49	1	2005.93750	2005.93932	-182
2+4 RQ(28,18)	28	19	2005.24832	2005.24921	-89	2+4 RQ(25,12)	25	13	2005.94763	2005.94803	-39
2+4 RQ(33,15)	33	16	2005.25617	2005.25559	58	2+4 RQ(43, 3)	43	4	2005.96980	2005.97052	-71
2+4 RQ(57, 0)	57	1	2005.25617	2005.25588	29	2+4 RQ(24,12)	24	13	2005.98994	2005.98959	35
2+4 RQ(38,12)	38	13	2005.25617	2005.25727	-110	2+4 RQ(31, 9)	31	10	2005.98994	2005.99100	-106
2+4 RQ(27,18)	27	19	2005.29674	2005.29631	43	2+4 RQ(37, 6)	37	7	2005.99877	2005.99922	-46
2+4 RQ(32,15)	32	16	2005.31046	2005.31068	-22	2+4 RQ(48, 0)	48	1	2006.01715	2006.01768	-53
2+4 RQ(42, 9)	42	10	2005.31955	2005.31894	62	2+4 RQ(23,12)	23	13	2006.02904	2006.02950	-46
2+4 RQ(37,12)	37	13	2005.31955	2005.32030	-75	2+4 RQ(42, 3)	42	4	2006.04166	2006.04094	72
2+4 RQ(26,18)	26	19	2005.34167	2005.34173	-7	2+4 RQ(30, 9)	30	10	2006.04166	2006.04226	-60
2+4 RQ(51, 3)	51	4	2005.34861	2005.34900	-39	2+4 RQ(36, 6)	36	7	2006.06049	2006.06018	31
2+4 RQ(31,15)	31	16	2005.36339	2005.36411	-72	2+4 RQ(22,12)	22	13	2006.06747	2006.06776	-29
2+4 RQ(46, 6)	46	7	2005.37631	2005.37663	-32	2+4 RQ(29, 9)	29	10	2006.09208	2006.09187	21
2+4 RQ(36,12)	36	13	2005.38156	2005.38168	-12	2+4 RQ(47, 0)	47	1	2006.09208	2006.09229	-21
2+4 RQ(25,18)	25	19	2005.38766	2005.38549	218	2+4 RQ(21,12)	21	13	2006.10421	2006.10435	-15
2+4 RQ(41, 9)	41	10	2005.38766	2005.38821	-55	2+4 RQ(41, 3)	41	4	2006.10964	2006.10975	-10
2+4 RP(7, 0)	6	1	2005.41549	2005.41538	11	2+4 RQ(35, 6)	35	7	2006.11936	2006.11950	-14
2+4 RQ(30,15)	30	16	2005.41549	2005.41588	-40	2+4 RQ(20,12)	20	13	2006.13861	2006.13929	-68
2+4 RQ(24,18)	24	19	2005.42716	2005.42756	-40	2+4 RQ(28, 9)	28	10	2006.13861	2006.13984	-123
2+4 RQ(55, 0)	55	1	2005.43383	2005.43615	-232	2+4 RQ(46, 0)	46	1	2006.17088	2006.16965	122
2+4 RQ(35,12)	35	13	2005.44035	2005.44141	-106	2+4 PP(6, 3)	5	2	2006.17088	2006.17082	6
2+4 PP(8, 3)	7	2	2005.44875	2005.44829	46	2+4 RQ(19,12)	19	13	2006.17088	2006.17257	-169
2+4 RQ(45, 6)	45	7	2005.45421	2005.45238	183	2+4 RQ(40, 3)	40	4	2006.17700	2006.17693	7
2+4 RQ(40, 9)	40	10	2005.45421	2005.45586	-164	2+4 RQ(34, 6)	34	7	2006.17700	2006.17717	-18
2+4 RQ(29,15)	29	16	2005.46576	2005.46599	-23	2+4 RQ(27, 9)	27	10	2006.18568	2006.18616	-48
2+4 RQ(23,18)	23	19	2005.46576	2005.46796	-220	2+4 RQ(18,12)	18	13	2006.20398	2006.20418	-20
2+4 PP(9, 6)	8	5	2005.49020	2005.49008	12	2+4 PP(7, 6)	6	5	2006.21635	2006.21581	54
2+4 RQ(34,12)	34	13	2005.49902	2005.49950	-49	2+4 RQ(26, 9)	26	10	2006.23202	2006.23083	119
2+4 RQ(49, 3)	49	4	2005.51424	2005.51405	20	2+4 RQ(33, 6)	33	7	2006.23202	2006.23320	-118
2+4 RQ(28,15)	28	16	2005.51424	2005.51444	-20	2+4 RQ(17,12)	17	13	2006.23202	2006.23414	-211

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RQ(39, 3)	39 4	2006.24284	2006.24249	34	2+4 RQ(14, 6)	14 7	2006.98466	2006.98521	-55
2+4 RQ(45, 0)	45 1	2006.24284	2006.24327	-44	2+4 RQ(25, 3)	25 4	2006.98942	2006.98935	6
2+4 RQ(16, 12)	16 13	2006.25915W	2006.26243	-328	2+4 RQ(33, 0)	33 1	2007.00333	2007.00304	29
2+4 RQ(25, 9)	25 10	2006.27400	2006.27386	14	2+4 RQ(13, 6)	13 7	2007.00888	2007.00832	55
2+4 RQ(32, 6)	32 7	2006.28769	2006.28759	11	2+4 PQ(45, 6)	45 5	2007.01912	2007.01855	57
2+4 RQ(15, 12)	15 13	2006.28769	2006.28907	-137	2+4 PQ(39, 3)	39 2	2007.02558	2007.02547	11
2+4 RQ(38, 3)	38 4	2006.30653	2006.30643	10	2+4 RQ(12, 6)	12 7	2007.02996	2007.02978	18
2+4 RQ(24, 9)	24 10	2006.31494	2006.31523	-30	2+4 RQ(24, 3)	24 4	2007.02996	2007.03044	-48
2+4 RQ(44, 0)	44 1	2006.31494	2006.31531	-38	2+4 RQ(11, 6)	11 7	2007.04807	2007.04960	-152
2+4 RQ(31, 6)	31 7	2006.34002	2006.34033	-30	2+4 RQ(32, 0)	32 1	2007.05624	2007.05602	22
2+4 RQ(23, 9)	23 10	2006.35480	2006.35496	-16	2+4 RQ(10, 6)	10 7	2007.06923	2007.06776	147
2+4 RQ(37, 3)	37 4	2006.36905	2006.36874	31	2+4 RQ(23, 3)	23 4	2007.06923	2007.06989	-66
2+4 PQ(48, 3)	48 2	2006.38135	2006.38141	-6	2+4 RQ(9, 6)	9 7	2007.08435	2007.08427	8
2+4 RQ(43, 0)	43 1	2006.38637	2006.38577	60	2+4 PQ(38, 3)	38 2	2007.09034	2007.08900	135
2+4 RQ(30, 6)	30 7	2006.39205	2006.39142	62	2+4 PQ(44, 6)	44 5	2007.09034	2007.09164	-129
2+4 RQ(22, 9)	22 10	2006.39205	2006.39304	-99	2+4 RQ(8, 6)	8 7	2007.09932	2007.09913	20
2+4 RQ(36, 3)	36 4	2006.42932	2006.42943	-11	2+4 RQ(31, 0)	31 1	2007.10756	2007.10740	16
2+4 RQ(21, 9)	21 10	2006.42932	2006.42946	-14	2+4 RQ(22, 3)	22 4	2007.10756	2007.10771	-14
2+4 RQ(29, 6)	29 7	2006.44016	2006.44088	-71	2+4 PQ(54, 12)	54 11	2007.13430	2007.13317	113
2+4 RQ(42, 0)	42 1	2006.45552	2006.45464	87	2+4 RQ(21, 3)	21 4	2007.14346	2007.14388	-42
2+4 PQ(47, 3)	47 2	2006.46245W	2006.45938	306	2+4 PQ(37, 3)	37 2	2007.15135	2007.15091	45
2+4 RQ(20, 9)	20 10	2006.46245	2006.46424	-179	2+4 RQ(30, 0)	30 1	2007.15734	2007.15718	16
2+4 RQ(35, 3)	35 4	2006.48852	2006.48849	3	2+4 PQ(43, 6)	43 5	2007.16352	2007.16312	40
2+4 RQ(28, 6)	28 7	2006.48852	2006.48869	-17	2+4 RQ(20, 3)	20 4	2007.17871	2007.17841	30
2+4 RQ(19, 9)	19 10	2006.49706	2006.49736	-31	2+4 RQ(29, 0)	29 1	2007.20447	2007.20536	-89
2+4 RQ(41, 0)	41 1	2006.52126	2006.52193	-67	2+4 PQ(48, 9)	48 8	2007.20447	2007.20738	-292
2+4 RQ(18, 9)	18 10	2006.52925	2006.52883	42	2+4 PQ(36, 3)	36 2	2007.21146	2007.21121	25
2+4 PP(5, 3)	4 2	2006.52925	2006.52964	-38	2+4 RQ(19, 3)	19 4	2007.21146	2007.21130	16
2+4 RQ(27, 6)	27 7	2006.53515	2006.53485	30	2+4 PQ(53, 12)	53 11	2007.22185	2007.22043	142
2+4 PQ(46, 3)	46 2	2006.53515	2006.53576	-61	2+4 PQ(42, 6)	42 5	2007.23304	2007.23300	5
2+4 RQ(34, 3)	34 4	2006.54609	2006.54592	17	2+4 RQ(18, 3)	18 4	2007.24215	2007.24255	-40
2+4 RQ(17, 9)	17 10	2006.55829	2006.55865	-36	2+4 RQ(28, 0)	28 1	2007.25189	2007.25195	-6
2+4 PP(6, 6)	5 5	2006.57794	2006.57623	171	2+4 PQ(35, 3)	35 2	2007.27094	2007.26989	105
2+4 RQ(26, 6)	26 7	2006.57794	2006.57937	-143	2+4 RQ(17, 3)	17 4	2007.27094	2007.27216	-121
2+4 RQ(16, 9)	16 10	2006.58718	2006.58681	37	2+4 PQ(47, 9)	47 8	2007.28194	2007.28465	-270
2+4 RQ(40, 0)	40 1	2006.58718	2006.58763	-45	2+4 RQ(27, 0)	27 1	2007.29829	2007.29694	135
2+4 RQ(33, 3)	33 4	2006.60195	2006.60173	22	2+4 RQ(16, 3)	16 4	2007.29829	2007.30012	-183
2+4 PQ(45, 3)	45 2	2006.61116	2006.61053	63	2+4 PQ(41, 6)	41 5	2007.29829	2007.30127	-298
2+4 RQ(15, 9)	15 10	2006.61116	2006.61332	-216	2+4 PQ(52, 12)	52 11	2007.30735	2007.30610	126
2+4 RQ(25, 6)	25 7	2006.62192	2006.62225	-33	2+4 RQ(15, 3)	15 4	2007.32686	2007.32644	42
2+4 PQ(50, 6)	50 5	2006.62898	2006.62908	-10	2+4 PQ(34, 3)	34 2	2007.32686	2007.32696	-10
2+4 RQ(14, 9)	14 10	2006.63815	2006.63817	-2	2+4 RQ(26, 0)	26 1	2007.34028	2007.34033	-5
2+4 RQ(39, 0)	39 1	2006.65187	2006.65175	12	2+4 RQ(14, 3)	14 4	2007.35108	2007.35112	-4
2+4 RQ(32, 3)	32 4	2006.65631	2006.65590	41	2+4 PQ(46, 9)	46 8	2007.35857	2007.36137	-280
2+4 RQ(13, 9)	13 10	2006.66288	2006.66137	150	2+4 PQ(40, 6)	40 5	2007.36819	2007.36793	26
2+4 RQ(24, 6)	24 7	2006.66288	2006.66348	-60	2+4 RQ(13, 3)	13 4	2007.37450	2007.37415	34
2+4 RQ(12, 9)	12 10	2006.68349	2006.68292	57	2+4 RQ(25, 0)	25 1	2007.38258	2007.38211	47
2+4 PQ(44, 3)	44 2	2006.68349	2006.68370	-22	2+4 PQ(33, 3)	33 2	2007.38258	2007.38241	17
2+4 RQ(11, 9)	11 10	2006.70286	2006.70281	6	2+4 RQ(12, 3)	12 4	2007.39499	2007.39555	-55
2+4 RQ(23, 6)	23 7	2006.70286	2006.70306	-20	2+4 RQ(11, 3)	11 4	2007.41553	2007.41529	24
2+4 RQ(31, 3)	31 4	2006.70925	2006.70844	81	2+4 RQ(24, 0)	24 1	2007.42238	2007.42230	8
2+4 PQ(49, 6)	49 5	2006.70925	2006.71017	-92	2+4 PQ(39, 6)	39 5	2007.43429	2007.43298	132
2+4 RQ(38, 0)	38 1	2006.71515	2006.71427	88	2+4 RQ(10, 3)	10 4	2007.43429	2007.43339	90
2+4 RQ(22, 6)	22 7	2006.74065	2006.74100	-36	2+4 PQ(45, 9)	45 8	2007.43429	2007.43596	-166
2+4 PQ(43, 3)	43 2	2006.75837W	2006.75527	310	2+4 PQ(32, 3)	32 2	2007.43429	2007.43624	-195
2+4 RQ(30, 3)	30 4	2006.75837	2006.75934	-98	2+4 RQ(9, 3)	9 4	2007.44962	2007.44985	-23
2+4 RQ(37, 0)	37 1	2006.77645	2006.77521	124	2+4 RQ(23, 0)	23 1	2007.46217	2007.46089	129
2+4 RQ(21, 6)	21 7	2006.77645	2006.77729	-84	2+4 RQ(8, 3)	8 4	2007.46217	2007.46466	-249
2+4 PQ(48, 6)	48 5	2006.78983	2006.78967	17	2+4 PQ(50, 12)	50 11	2007.47277	2007.47265	11
2+4 RQ(29, 3)	29 4	2006.81069	2006.80862	207	2+4 RQ(55, 15)	55 14	2007.47760	2007.47699	61
2+4 RQ(20, 6)	20 7	2006.81069	2006.81194	-125	2+4 RQ(7, 3)	7 4	2007.47760	2007.47783	-23
2+4 PQ(42, 3)	42 2	2006.82543	2006.82523	20	2+4 PQ(31, 3)	31 2	2007.48895	2007.48846	50
2+4 RQ(36, 0)	36 1	2006.83500	2006.83456	44	2+4 RQ(6, 3)	6 4	2007.48895	2007.48935	-39
2+4 RQ(19, 6)	19 7	2006.84478	2006.84494	-16	2+4 PQ(38, 6)	38 5	2007.49734	2007.49641	92
2+4 RQ(28, 3)	28 4	2006.85620	2006.85625	-5	2+4 RQ(22, 0)	22 1	2007.49734	2007.49787	-53
2+4 PQ(47, 6)	47 5	2006.86770	2006.86756	13	2+4 RQ(5, 3)	5 4	2007.49734	2007.49922	-189
2+4 RQ(18, 6)	18 7	2006.87570	2006.87629	-59	2+4 RQ(4, 3)	4 4	2007.50707	2007.50745	-39
2+4 PP(4, 3)	3 2	2006.88764	2006.88683	81	2+4 PQ(44, 9)	44 8	2007.50707	2007.50894	-188
2+4 RQ(35, 0)	35 1	2006.89337	2006.89231	106	2+4 RQ(21, 0)	21 1	2007.53357	2007.53325	32
2+4 PQ(41, 3)	41 2	2006.89337	2006.89359	-21	2+4 PQ(30, 3)	30 2	2007.53947	2007.53905	42
2+4 RQ(27, 3)	27 4	2006.90348	2006.90226	122	2+4 PQ(49, 12)	49 11	2007.55619	2007.55354	265
2+4 RQ(17, 6)	17 7	2006.90348	2006.90599	-252	2+4 PQ(37, 6)	37 5	2007.55619	2007.55824	-205
2+4 RQ(16, 6)	16 7	2006.93377	2006.93405	-28	2+4 RQ(20, 0)	20 1	2007.56693	2007.56702	-9
2+4 PQ(46, 6)	46 5	2006.94651	2006.94386	265	2+4 RQ(43, 9)	43 8	2007.57875	2007.58032	-157
2+4 RQ(26, 3)	26 4	2006.94651	2006.94662	-11	2+4 PQ(29, 3)	29 2	2007.58829	2007.58802	27
2+4 RQ(34, 0)	34 1	2006.94651	2006.94847	-196	2+4 RQ(19, 0)	19 1	2007.59938	2007.59919	19
2+4 PQ(40, 3)	40 2	2006.96046	2006.96033	12	2+4 PQ(36, 6)	36 5	2007.61862	2007.61845	17
2+4 RQ(15, 6)	15 7	2006.96046	2006.96046	0	2+4 RQ(18, 0)	18 1	2007.63020	2007.62976	45

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	(I)	(II)		(III)	(IV)	(V)		(I)	(II)		(III)	(IV)	(V)
2+4	PQ(48,12)	48	11	2007.63020	2007.63283	-263	2+4	PQ(23, 6)	23	5	2008.25405	2008.25395	10
2+4	PQ(28, 3)	28	2	2007.63516	2007.63537	-21	2+4	RR(0, 0)	1	1	2008.25405	2008.25398	8
2+4	PQ(42, 9)	42	8	2007.64889	2007.65010	-121	2+4	PQ(32, 9)	32	8	2008.26026	2008.25934	92
2+4	RQ(17, 0)	17	1	2007.65900	2007.65872	28	2+4	PQ(51,18)	51	17	2008.26026	2008.26040	-13
2+4	PQ(35, 6)	35	5	2007.67700	2007.67705	-5	2+4	PQ(6, 3)	6	2	2008.26687	2008.26486	201
2+4	PQ(27, 3)	27	2	2007.68117	2007.68109	8	2+4	PQ(56,21)	56	20	2008.26687	2008.26814	-127
2+4	RQ(16, 0)	16	1	2007.68640	2007.68607	33	2+4	PQ(39,12)	39	11	2008.27501	2008.27440	61
2+4	PQ(47,12)	47	11	2007.71142	2007.71052	89	2+4	PQ(5, 3)	5	2	2008.27501	2008.27469	33
2+4	RQ(15, 0)	15	1	2007.71142	2007.71182	-40	2+4	PQ(4, 3)	4	2	2008.28264	2008.28287	-24
2+4	PQ(41, 9)	41	8	2007.71830	2007.71827	3	2+4	PQ(22, 6)	22	5	2008.29202	2008.29147	54
2+4	PQ(26, 3)	26	2	2007.72548	2007.72519	28	2+4	PQ(45,15)	45	14	2008.29202	2008.29288	-86
2+4	PQ(34, 6)	34	5	2007.73470	2007.73404	67	2+4	PQ(31, 9)	31	8	2008.31203	2008.31139	64
2+4	RQ(14, 0)	14	1	2007.73470	2007.73596	-125	2+4	PQ(21, 6)	21	5	2008.32773	2008.32737	36
2+4	RQ(13, 0)	13	1	2007.75785	2007.75849	-64	2+4	PQ(38,12)	38	11	2008.33848	2008.33766	82
2+4	PQ(25, 3)	25	2	2007.76838	2007.76767	71	2+4	PQ(60,24)	60	23	2008.33848	2008.33917	-70
2+4	RQ(12, 0)	12	1	2007.78024	2007.77941	82	2+4	PQ(20, 6)	20	5	2008.36225	2008.36164	60
2+4	PQ(40, 9)	40	8	2007.78763	2007.78483	280	2+4	PQ(30, 9)	30	8	2008.36225	2008.36182	43
2+4	PQ(46,12)	46	11	2007.78763	2007.78662	101	2+4	PQ(44,15)	44	14	2008.36225W	2008.36569	-344
2+4	PQ(33, 6)	33	5	2007.78763	2007.78940	-177	2+4	PQ(19, 6)	19	5	2008.39386	2008.39429	-42
2+4	RQ(11, 0)	11	1	2007.79904	2007.79873	31	2+4	PQ(37,12)	37	11	2008.39989	2008.39931	58
2+4	PQ(24, 3)	24	2	2007.80888	2007.80852	36	2+4	PQ(29, 9)	29	8	2008.41154	2008.41063	91
2+4	RQ(10, 0)	10	1	2007.81646	2007.81644	2	2+4	PQ(49,18)	49	17	2008.42491	2008.42343	148
2+4	PQ(51,15)	51	14	2007.82361	2007.82247	114	2+4	PQ(18, 6)	18	5	2008.42491	2008.42530	-39
2+4	PQ(56,18)	56	17	2007.82361	2007.82499	-138	2+4	PQ(43,15)	43	14	2008.43687	2008.43690	-3
2+4	RQ(9, 0)	9	1	2007.83283	2007.83254	29	2+4	PQ(54,21)	54	20	2008.44560	2008.44693	-133
2+4	PQ(32, 6)	32	5	2007.84344	2007.84315	29	2+4	PQ(17, 6)	17	5	2008.45480	2008.45469	12
2+4	RQ(8, 0)	8	1	2007.84845	2007.84703	142	2+4	PQ(28, 9)	28	8	2008.45928	2008.45783	145
2+4	PQ(23, 3)	23	2	2007.84845	2007.84774	71	2+4	PQ(36,12)	36	11	2008.45928	2008.45935	-7
2+4	PQ(39, 9)	39	8	2007.84845	2007.84979	-134	2+4	PQ(16, 6)	16	5	2008.48271	2008.48244	27
2+4	RQ(7, 0)	7	1	2007.86118	2007.85991	127	2+4	PQ(27, 9)	27	8	2008.50525	2008.50340	185
2+4	PQ(45,12)	45	11	2007.86118	2007.86111	7	2+4	PQ(42,15)	42	14	2008.50525	2008.50650	-125
2+4	RQ(6, 0)	6	1	2007.87118	2007.87118	0	2+4	PQ(15, 6)	15	5	2008.50525W	2008.50857	-332
2+4	RQ(5, 0)	5	1	2007.88360	2007.88084	276	2+4	PQ(35,12)	35	11	2008.51785	2008.51778	7
2+4	PQ(22, 3)	22	2	2007.88360	2007.88533	-173	2+4	PQ(14, 6)	14	5	2008.53297	2008.53306	-9
2+4	PQ(31, 6)	31	5	2007.89542	2007.89528	14	2+4	PQ(53,21)	53	20	2008.53297	2008.53394	-96
2+4	RQ(3, 0)	3	1	2007.89542	2007.89533	8	2+4	PQ(26, 9)	26	8	2008.54864	2008.54735	129
2+4	PQ(50,15)	50	14	2007.90588	2007.90486	102	2+4	PQ(13, 6)	13	5	2008.55600	2008.55593	7
2+4	PQ(38, 9)	38	8	2007.91354	2007.91313	40	2+4	PQ(41,15)	41	14	2008.57535	2008.57450	84
2+4	PQ(55,18)	55	17	2007.91354	2007.91525	-171	2+4	PQ(34,12)	34	11	2008.57535	2008.57460	75
2+4	PQ(21, 3)	21	2	2007.92171	2007.92129	41	2+4	PQ(12, 6)	12	5	2008.57535	2008.57716	-181
2+4	PQ(44,12)	44	11	2007.93491	2007.93400	91	2+4	PQ(47,18)	47	17	2008.58020	2008.58008	12
2+4	PQ(30, 6)	30	5	2007.94592	2007.94579	13	2+4	PQ(25, 9)	25	8	2008.59130	2008.58968	161
2+4	PQ(20, 3)	20	2	2007.95564	2007.95563	1	2+4	PQ(11, 6)	11	5	2008.59733	2008.59676	57
2+4	PQ(37, 9)	37	8	2007.97489	2007.97487	2	2+4	PQ(10, 6)	10	5	2008.61685	2008.61473	211
2+4	PQ(59,21)	59	20	2007.98825	2007.98809	16	2+4	PQ(52,21)	52	20	2008.61685	2008.61936	-251
2+4	PQ(19, 3)	19	2	2007.98825	2007.98833	-8	2+4	PQ(33,12)	33	11	2008.63090	2008.62980	110
2+4	PQ(29, 6)	29	5	2007.99392	2007.99468	-76	2+4	PQ(24, 9)	24	8	2008.63090	2008.63039	51
2+4	PQ(43,12)	43	11	2008.00526	2008.00529	-3	2+4	PQ(9, 6)	9	5	2008.63090	2008.63107	-17
2+4	PQ(18, 3)	18	2	2008.01923	2008.01941	-17	2+4	PQ(40,15)	40	14	2008.64138	2008.64090	48
2+4	PQ(36, 9)	36	8	2008.03550	2008.03499	51	2+4	PQ(46,18)	46	17	2008.65589	2008.65601	-12
2+4	PQ(28, 6)	28	5	2008.04277	2008.04195	82	2+4	PQ(23, 9)	23	8	2008.67118	2008.66948	170
2+4	PQ(17, 3)	17	2	2008.04901	2008.04885	17	2+4	PQ(6, 6)	6	5	2008.67118	2008.67028	90
2+4	PQ(48,15)	48	14	2008.06533	2008.06486	47	2+4	PQ(32,12)	32	11	2008.68352	2008.68340	12
2+4	PQ(42,12)	42	11	2008.07643	2008.07498	145	2+4	PQ(39,15)	39	14	2008.70584	2008.70569	15
2+4	PQ(16, 3)	16	2	2008.07643	2008.07666	-23	2+4	PQ(22, 9)	22	8	2008.70584	2008.70694	-110
2+4	PQ(27, 6)	27	5	2008.08825	2008.08760	65	2+4	PQ(56,24)	56	23	2008.71546	2008.71548	-2
2+4	PQ(53,18)	53	17	2008.08825	2008.09100	-275	2+4	PQ(45,18)	45	17	2008.73033	2008.73035	-2
2+4	PQ(35, 9)	35	8	2008.09366	2008.09350	16	2+4	PQ(31,12)	31	11	2008.73580	2008.73537	43
2+4	PQ(15, 3)	15	2	2008.10305	2008.10283	22	2+4	PQ(21, 9)	21	8	2008.74483	2008.74278	205
2+4	PQ(14, 3)	14	2	2008.12749	2008.12738	12	2+4	PQ(38,15)	38	14	2008.76915	2008.76888	27
2+4	PQ(26, 6)	26	5	2008.13227	2008.13162	65	2+4	PQ(20, 9)	20	8	2008.77962	2008.77700	262
2+4	PQ(47,15)	47	14	2008.14327	2008.14246	81	2+4	PQ(50,21)	50	20	2008.78594	2008.78544	50
2+4	PQ(41,12)	41	11	2008.14327	2008.14306	21	2+4	PQ(30,12)	30	11	2008.78594	2008.78573	20
2+4	PQ(13, 3)	13	2	2008.15048	2008.15028	19	2+4	PQ(44,18)	44	17	2008.80326	2008.80308	18
2+4	PQ(34, 9)	34	8	2008.15048	2008.15039	8	2+4	PQ(55,24)	55	23	2008.80326	2008.80560	-234
2+4	PQ(12, 3)	12	2	2008.17402	2008.17156	246	2+4	PQ(19, 9)	19	8	2008.81208	2008.80958	250
2+4	PQ(25, 6)	25	5	2008.17402	2008.17402	-1	2+4	PQ(37,15)	37	14	2008.83101	2008.83046	55
2+4	PQ(57,21)	57	20	2008.17402	2008.17638	-236	2+4	PQ(29,12)	29	11	2008.83513	2008.83448	66
2+4	PQ(52,18)	52	17	2008.17402	2008.17649	-248	2+4	PQ(18, 9)	18	8	2008.84346	2008.84055	292
2+4	PQ(11, 3)	11	2	2008.19141	2008.19120	21	2+4	PQ(49,21)	49	20	2008.86650	2008.86609	41
2+4	PQ(33, 9)	33	8	2008.20813	2008.20567	246	2+4	PQ(17, 9)	17	8	2008.86650W	2008.86988	-338
2+4	PQ(10, 3)	10	2	2008.20813	2008.20920	-107	2+4	PQ(43,18)	43	17			

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	PQ(42,18)	42	17	2008.94609	2008.94376	234		2+4	PQ(20,15)	20	14	2009.63057	2009.63050	7					
2+4	PQ(48,21)	48	20	2008.94609	2008.94515	94		2+4	PQ(38,21)	38	20	2009.64789	2009.64788	1					
2+4	PQ(14, 9)	14	8	2008.94609	2008.94813	-203		2+4	PQ(30,18)	30	17	2009.65280	2009.65295	-16					
2+4	PQ(35,15)	35	14	2008.94609	2008.94879	-269		2+4	PQ(19,15)	19	14	2009.66265	2009.66300	-35					
2+4	PQ(13, 9)	13	8	2008.97075	2008.97095	-20		2+4	PQ(50,27)	50	26	2009.68274	2009.68310	-36					
2+4	PQ(26,12)	26	11	2008.97075	2008.97100	-25		2+4	PQ(44,24)	44	23	2009.69295	2009.69209	86					
2+4	PQ(53,24)	53	23	2008.97842	2008.98109	-267		2+4	PQ(18,15)	18	14	2009.69295	2009.69388	-93					
2+4	PQ(58,27)	58	26	2008.97842W	2008.98157	-315		225	RR(38,33)	39	34	2009.70201	2009.70140	62					
2+4	PQ(31, 9)	12	8	2008.99171	2008.99215	-44		2+4	PQ(29,18)	29	17	2009.70201	2009.70159	42					
2+4	PQ(34,15)	34	14	2009.00593	2009.00554	40		2+4	PQ(60,33)	60	32	2009.70201	2009.70176	25					
2+4	PQ(41,18)	41	17	2009.01237	2009.01169	67		2+4	PQ(37,21)	37	20	2009.70931	2009.70934	-3					
2+4	PQ(11, 9)	11	8	2009.01237	2009.01172	65		2+4	PQ(55,30)	55	29	2009.70931	2009.71065	-133					
2+4	PQ(25,12)	25	11	2009.01237	2009.01328	-91		2+4	PQ(17,15)	17	14	2009.72243	2009.72314	-70					
2+4	PQ(47,21)	47	20	2009.02209	2009.02261	-52		2+4	PQ(28,18)	28	17	2009.74856	2009.74861	-5					
2+4	PQ(10, 9)	10	8	2009.02952	2009.02966	-14		2+4	PQ(16,15)	16	14	2009.74856	2009.75077	-221					
2+4	PQ(24,12)	24	11	2009.05418	2009.05393	25		2+4	PQ(43,24)	43	23	2009.76248	2009.76312	-63					
2+4	PQ(33,15)	33	14	2009.06059	2009.06068	-9		2+4	PQ(49,27)	49	26	2009.76248	2009.76365	-117					
2+4	PQ(52,24)	52	23	2009.06661	2009.06645	15		2+4	PQ(36,21)	36	20	2009.76876	2009.76920	-44					
2+4	PQ(40,18)	40	17	2009.07592	2009.07802	-210		225	RR(39,30)	40	31	2009.76876	2009.77175	-299					
2+4	PQ(23,12)	23	11	2009.09293	2009.09296	-3		2+4	PQ(27,18)	27	17	2009.79409	2009.79402	7					
2+4	PQ(46,21)	46	20	2009.09918	2009.09848	70		2+4	PQ(59,33)	59	32	2009.79934	2009.79808	127					
2+4	PQ(32,15)	32	14	2009.11369	2009.11420	-51		2+4	PQ(54,30)	54	29	2009.79934	2009.79909	25					
2+4	PQ(22,12)	22	11	2009.13027	2009.13037	-10		2+4	PQ(35,21)	35	20	2009.82699	2009.82745	-46					
2+4	PQ(39,18)	39	17	2009.14082	2009.14275	-193		2+4	PQ(42,24)	42	23	2009.83233	2009.83254	-21					
2+4	PQ(51,24)	51	23	2009.14927	2009.15023	-96		2+4	PQ(26,18)	26	17	2009.83781	2009.83781	0					
2+4	PQ(31,15)	31	14	2009.16466	2009.16612	-145		2+4	PQ(48,27)	48	26	2009.84328	2009.84261	67					
2+4	PQ(21,12)	21	11	2009.16466	2009.16615	-149		2+4	PQ(25,18)	25	17	2009.87931	2009.87999	-68					
2+4	PQ(56,27)	56	26	2009.16466	2009.16646	-180		2+4	PQ(34,21)	34	20	2009.88433	2009.88409	24					
2+4	PQ(45,21)	45	20	2009.17294	2009.17276	18		2+4	PQ(53,30)	53	29	2009.88433	2009.88596	-163					
2+4	PQ(20,12)	20	11	2009.20033	2009.20032	1		2+4	PQ(58,33)	58	32	2009.89001	2009.89282	-281					
2+4	PQ(38,18)	38	17	2009.20593	2009.20587	6		2+4	PQ(41,24)	41	23	2009.90189	2009.90037	151					
225	RR(37,30)	38	31	2009.21625	2009.21577	48		2+4	RR(7, 6)	8	7	2009.90189	2009.90422	-233					
2+4	PQ(30,15)	30	14	2009.21625	2009.21642	-16		2+4	PQ(47,27)	47	26	2009.92005	2009.91998	7					
2+4	PQ(50,24)	50	23	2009.23259	2009.23242	17		2+4	PQ(24,18)	24	17	2009.92005	2009.92055	-50					
2+4	PQ(19,12)	19	11	2009.23259	2009.23286	-27		2+4	RR(6, 3)	7	4	2009.93243	2009.93232	10					
2+4	PQ(60,30)	60	29	2009.24523	2009.24469	54		2+4	PQ(33,21)	33	20	2009.93900	2009.93913	-13					
2+4	PQ(44,21)	44	20	2009.24523	2009.24543	-20		2+4	PQ(23,18)	23	17	2009.95950	2009.95949	1					
2+4	RR(4, 3)	5	4	2009.25251	2009.25246	5		2+4	PQ(40,24)	40	23	2009.96602	2009.96660	-58					
2+4	PQ(18,12)	18	11	2009.26490	2009.26378	112		2+4	PQ(52,30)	52	29	2009.97165	2009.97123	42					
2+4	PQ(29,15)	29	14	2009.26490	2009.26510	-20		225	RR(39,33)	40	34	2009.98285W	2009.97915	369					
2+4	PQ(37,18)	37	17	2009.26490	2009.26739	-249		2+4	PQ(32,21)	32	20	2009.99387	2009.99255	131					
2+4	PQ(17,12)	17	11	2009.29277	2009.29307	-31		2+4	PQ(46,27)	46	26	2009.99387	2009.99575	-188					
2+4	PQ(28,15)	28	14	2009.31221	2009.31217	3		2+4	PQ(22,18)	22	17	2009.99387	2009.99681	-294					
2+4	PQ(49,24)	49	23	2009.31221	2009.31301	-81		2+4	PQ(39,24)	39	23	2010.03134	2010.03123	11					
2+4	PQ(36,18)	36	17	2009.32644	2009.32730	-86		2+4	PQ(21,18)	21	17	2010.03134	2010.03252	-118					
2+4	PQ(54,27)	54	26	2009.34607	2009.34501	106		2+4	PQ(31,21)	31	20	2010.04433	2010.04437	-4					
2+4	PQ(15,12)	15	11	2009.34607	2009.34678	-71		225	RR(40,30)	41	31	2010.04433	2010.04696	-263					
2+4	PQ(27,15)	27	14	2009.35737	2009.35763	-26		2+4	PQ(51,30)	51	29	2010.05330	2010.05493	-163					
2+4	PQ(14,12)	14	11	2009.37055	2009.37120	-65		2+4	PQ(20,18)	20	17	2010.06561	2010.06660	-100					
2+4	PQ(35,18)	35	17	2009.38554	2009.38560	-5		2+4	PQ(45,27)	45	26	2010.06971	2010.06993	-22					
2+4	PQ(42,21)	42	20	2009.38554	2009.38599	-44		2+4	PQ(56,33)	56	32	2010.07727	2010.07756	-28					
2+4	PQ(48,24)	48	23	2009.39257	2009.39202	56		2+4	PQ(38,24)	38	23	2010.09403	2010.09425	-22					
2+4	PQ(13,12)	13	11	2009.39257	2009.39399	-142		2+4	PQ(30,21)	30	20	2010.09403	2010.09458	-55					
2+4	PQ(26,15)	26	14	2009.40145	2009.40146	-2		2+4	PQ(19,18)	19	17	2010.09967	2010.09907	60					
2+4	PQ(12,12)	12	11	2009.41363	2009.41516	-153		2+4	PQ(18,18)	18	17	2010.13070	2010.12992	78					
225	RR(37,33)	38	34	2009.42352	2009.42180	171		2+4	PQ(50,30)	50	29	2010.13695	2010.13703	-8					
2+4	PQ(53,27)	53	26	2009.43163	2009.43192	-29		2+4	PQ(44,27)	44	26	2010.14258	2010.14251	7					
2+4	PQ(34,18)	34	17	2009.44285	2009.44229	56		2+4	PQ(29,21)	29	20	2010.14258	2010.14317	-59					
2+4	PQ(25,15)	25	14	2009.44285	2009.44368	-83		2+4	PQ(37,24)	37	23	2010.15516	2010.15567	-51					
2+4	PQ(41,21)	41	20	2009.45438	2009.45386	52		2+4	PQ(55,33)	55	32	2010.16896	2010.16756	140					
2+4	PQ(47,24)	47	23	2009.46934	2009.46943	-9		2+4	PQ(28,21)	28	20	2010.18993	2010.19015	-22					
2+4	PQ(24,15)	24	14	2009.48406	2009.48429	-22		2+4	PQ(43,27)	43	26	2010.21430	2010.21350	80					
225	RR(38,30)	39	31	2009.49680	2009.49469	211		2+4	PQ(36, 24)	36	23	2010.21430							

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
2+4 PQ(24,21)	24	20	2010.36174	2010.36193	-19	2+4 RR(11, 6)	12	7	2011.23618	2011.23723	-105
2+4 PQ(47,30)	47	29	2010.37210	2010.37380	-170	2+4 PQ(41,33)	41	32	2011.26166	2011.26086	80
2+4 PQ(33,24)	33	23	2010.38500	2010.38529	-29	2+4 PQ(53,39)	53	38	2011.26166	2011.26361	-195
2+4 PQ(23,21)	23	20	2010.40038	2010.40084	-46	2+4 RR(10, 3)	11	4	2011.27038	2011.27220	-182
2+4 PQ(40,27)	40	26	2010.41657	2010.41687	-30	2+4 PQ(33,30)	33	29	2011.28997	2011.28874	124
2+4 PQ(52,33)	52	32	2010.42785	2010.42806	-21	2+4 PQ(47,36)	47	35	2011.28997	2011.28970	27
2+4 PQ(22,21)	22	20	2010.43808	2010.43813	-5	2+4 RR(9, 0)	10	1	2011.31901	2011.31936	-35
2+4 PQ(32,24)	32	23	2010.43808	2010.43868	-60	2+4 PQ(40,33)	40	32	2011.32682	2011.32700	-18
2+4 PQ(46,30)	46	29	2010.44720	2010.44954	-234	225 RR(44,33)	45	34	2011.34073	2011.34041	33
2+4 PQ(21,21)	21	20	2010.47420	2010.47381	39	2+4 PQ(32,30)	32	29	2011.34073	2011.34207	-134
2+4 PQ(39,27)	39	26	2010.48116	2010.48146	-30	2+4 PQ(52,39)	52	38	2011.34961	2011.34883	78
2+4 PQ(31,24)	31	23	2010.49022	2010.49046	-24	2+4 PR(8, 3)	9	2	2011.38252	2011.38130	122
2+4 PQ(51,33)	51	32	2010.51093	2010.51172	-80	225 RR(46,27)	47	28	2011.38252	2011.38418	-166
2+4 PQ(45,30)	45	29	2010.52368	2010.52368	0	2+4 PQ(31,30)	31	29	2011.39373	2011.39380	-7
225 RR(41,33)	42	34	2010.53499W	2010.52916	582	225 RR(45,30)	46	31	2011.39373	2011.39524	-151
2+4 PQ(56,36)	56	35	2010.53499	2010.53693	-195	2+4 PQ(51,39)	51	38	2011.43337	2011.43247	91
2+4 PQ(30,24)	30	23	2010.54131	2010.54063	68	2+4 PQ(45,36)	45	35	2011.44002	2011.43951	51
2+4 PQ(38,27)	38	26	2010.54131W	2010.54444	-313	2+4 PQ(38,33)	38	32	2011.45489	2011.45448	41
2+4 RR(10, 9)	11	10	2010.55898	2010.55963	-65	2+4 PQ(56,42)	56	41	2011.46270	2011.46183	87
2+4 RR(9, 6)	10	7	2010.57289	2010.57405	-116	2+4 PQ(50,39)	50	38	2011.51517	2011.51452	65
2+4 PQ(29,24)	29	23	2010.58913	2010.58919	-6	2+4 PQ(37,33)	37	32	2011.51517	2011.51582	-65
225 RR(42,30)	43	31	2010.58913	2010.59183	-270	2+4 RR(13, 9)	14	10	2011.54660	2011.54664	-4
2+4 PQ(50,33)	50	32	2010.59515	2010.59380	135	2+4 RR(14,12)	15	13	2011.54660	2011.54795	-134
2+4 PQ(44,30)	44	29	2010.59515	2010.59624	-108	2+4 RR(12, 6)	13	7	2011.56630	2011.56632	-3
2+4 RR(8, 3)	9	4	2010.60561	2010.60557	4	2+4 RR(15,15)	16	16	2011.57469	2011.57521	-52
2+4 PQ(37,27)	37	26	2010.60561	2010.60583	-22	2+4 PQ(36,33)	36	32	2011.57469	2011.57555	-86
2+4 PQ(28,24)	28	23	2010.63580	2010.63614	-33	2+4 PQ(43,36)	43	35	2011.58298	2011.58294	4
2+4 RR(7, 0)	8	1	2010.65024	2010.64992	32	2+4 PQ(49,39)	49	38	2011.59602	2011.59498	104
2+4 PQ(36,27)	36	26	2010.66581	2010.66561	20	2+4 RR(11, 3)	12	4	2011.60289	2011.60303	-13
2+4 PQ(43,30)	43	29	2010.66581	2010.66719	-138	2+4 PQ(35,33)	35	32	2011.63326	2011.63368	-42
2+4 PQ(49,33)	49	32	2010.67471	2010.67429	43	225 RR(47,27)	48	28	2011.64852	2011.64570	282
2+4 PQ(27,24)	27	23	2010.68143	2010.68147	-5	2+4 RR(10, 0)	11	1	2011.65316	2011.65156	161
2+4 PQ(35,27)	35	26	2010.72289	2010.72379	-90	2+4 PQ(42,36)	42	35	2011.65316	2011.65226	90
2+4 PQ(42,30)	42	29	2010.73659	2010.73655	4	2+4 PQ(48,39)	48	38	2011.67427	2011.67385	42
2+4 PQ(48,33)	48	32	2010.75369	2010.75318	50	2+4 PQ(41,36)	41	35	2011.72017	2011.71998	19
2+4 PQ(34,27)	34	26	2010.78003	2010.78036	-32	2+4 PQ(53,42)	53	41	2011.72687	2011.72699	-12
225 RR(42,33)	43	34	2010.80323	2010.80141	182	2+4 PQ(47,39)	47	38	2011.75182	2011.75114	68
2+4 PQ(53,36)	53	35	2010.80323	2010.80213	110	2+4 PQ(40,36)	40	35	2011.78698	2011.78611	86
2+4 PQ(41,30)	41	29	2010.80323	2010.80431	-108	2+4 PQ(52,42)	52	41	2011.81236	2011.81221	15
2+4 PQ(24,24)	24	23	2010.80799	2010.80780	19	2+4 PQ(46,39)	46	38	2011.82630	2011.82683	-52
2+4 PQ(47,33)	47	32	2010.82959	2010.83049	-90	2+4 PQ(39,36)	39	35	2011.85100	2011.85064	36
2+4 PQ(33,27)	33	26	2010.83603	2010.83532	71	2+4 RR(15,12)	16	13	2011.87146	2011.87181	-34
225 RR(44,27)	45	28	2010.84811W	2010.85556	-745	2+4 RR(14, 9)	15	10	2011.87146	2011.87231	-84
225 RR(43,30)	44	31	2010.86260	2010.86148	111	2+4 RR(13, 6)	14	7	2011.89529	2011.89375	153
2+4 PQ(40,30)	40	29	2010.87036	2010.87047	-11	2+4 PQ(51,42)	51	41	2011.89529	2011.89585	-56
2+4 PQ(32,27)	32	26	2010.88962	2010.88868	94	2+4 RR(16,15)	17	16	2011.89529	2011.89722	-193
2+4 RR(11, 9)	12	10	2010.88962	2010.89030	-68	225 RR(48,27)	49	28	2011.90305	2011.90534	-229
2+4 RR(12,12)	13	13	2010.89559	2010.89519	41	225 RR(47,30)	48	31	2011.91977	2011.92157	-180
2+4 PQ(46,33)	46	32	2010.90648	2010.90621	28	2+4 RR(12, 3)	13	4	2011.93297	2011.93219	78
2+4 RR(10, 6)	11	7	2010.90648	2010.90647	1	2+4 PQ(37,36)	37	35	2011.97580	2011.97489	91
2+4 PQ(57,39)	57	38	2010.90648	2010.90690	-42	2+4 RR(11, 0)	12	1	2011.98284	2011.98207	77
2+4 PQ(39,30)	39	29	2010.93481	2010.93503	-22	2+4 PQ(43,39)	43	38	2012.04462	2012.04434	28
2+4 RR(9, 3)	10	4	2010.93997	2010.93971	25	2+4 PQ(42,39)	42	38	2012.11496	2012.11366	130
2+4 PQ(31,27)	31	26	2010.93997	2010.94043	-46	2+4 PQ(48,42)	48	41	2012.13783	2012.13724	59
2+4 PQ(51,36)	51	35	2010.97128	2010.97100	28	225 RR(49,27)	50	28	2012.16419	2012.16312	107
2+4 PQ(45,33)	45	32	2010.98023	2010.98033	-10	2+4 RR(16,12)	17	13	2012.19442	2012.19399	44
2+4 RR(8, 0)	9	1	2010.98023W	2010.98548	-525	2+4 RR(15, 9)	16	10	2012.19442	2012.19630	-187
2+4 PQ(30,27)	30	26	2010.99024	2010.99057	-33	2+4 RR(17,15)	18	16	2012.21748	2012.21754	-6
2+4 PQ(38,30)	38	29	2010.99710	2010.99799	-89	2+4 RR(14, 6)	15	7	2012.21748	2012.21952	-204
2+4 PQ(56,39)	56	38	2010.99710	2010.99845	-135	2+4 RR(13, 3)	14	4	2012.25922	2012.25970	-48
2+4 PQ(29,27)	29	26	2011.03820	2011.03910	-90	2+4 RR(18,18)	19	19	2012.27257	2012.27313	-57
2+4 PR(7, 3)	8	2	2011.04551	2011.04542	9	2+4 PQ(46,42)	46	41	2012.29074	2012.29021	53
2+4 PQ(44,33)	44	32	2011.05324	2011.05285	39	2+4 RR(12, 0)	13	1	2012.31122	2012.31090	32
2+4 PQ(50,36)	50	35	2011.05324	2011.05306	18	2+4 PQ(45,42)	45	41	2012.36469	2012.36431	37
2+4 PQ(37,30)	37	29	2011.05933	2011.05935	-1	2+4 PR(11, 3)	12	2	2012.37945	2012.37904	41
225 RR(43,33)	44	34	2011.07133	2011.07183	-50	225 RR(50,27)	51	28	2012.41756	2012.41903	-147
2+4 PQ(28,27)	28	26	2011.08638	2011.08602	36	225 RR(49,30)	50	31	2012.44294	2012.44049	245
2+4 PQ(60,42)	60	41	2011.08638	2011.08617	21	2+4 RR(17,12)	18	13	2012.51398	2012.51448	-50
2+4 PQ(55,39)	55	38	2011.08638	2011.08824	-186	2+4 RR(16, 9)	17	10	2012.51904	2012.51862	42
2+4 PQ(36,30)	36	29	2011.12139	2011.11910	229	2+4 RR(18,15)	19	16	2012.53586	2012.53617	-31
225 RR(45,27)	46	28	2011.12139	2011.12080	58	2+4 RR(15, 6)	16	7	2012.54334	2012.54362	-28
225 RR(44,30)	45	31	2011.13413W	2011.12929	484	2+4 RR(14, 3)	15	4	2012.58502	2012.58555	-53
2+4 PQ(49,36)	49	35	2011.13413	2011.13353	60	2+4 RR(19,18)	20	19	2012.58940	2012.58983	-44
2+4 PQ(59,42)	59	41	2011.18192	2011.18245	-53	2+4 RR(13, 0)	14	1	2012.63870	2012.63804	66
2+4 PQ(42,33)	42	32	2011.19321	2011.19312	9	225 RR(50,30)	51	31	2012.69702	2012.69717	-15
2+4 RR(12, 9)	13	10	2011.22014	2011.21931	83	2+4 PR(12, 3)	13	2	2012.70832	2012.70832	0
2+4 RR(13,12)	14	13	2011.22014	2011.22241	-226	2+4 RR(18,12)	19	13	2012.83298	2012.83330	-31
2+4 PQ(34,30)	34	29	2011.23618	2011.23380	238	2+4 RR(17, 9)	18	10	2012.83888	2012.83926	-37

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2+4 RR(19,15)	20	16	2012.85243	2012.85311	-68	2+4 RR(28,24)	29	25	2014.96554	2014.96444	110
2+4 RR(16, 6)	17	7	2012.86594	2012.86605	-11	2+4 PR(19, 3)	20	2	2014.96554	2014.96707	-153
2+4 RR(20,18)	21	19	2012.90450	2012.90483	-33	2+4 RR(25,12)	26	13	2015.01777	2015.01785	-8
2+4 RR(15, 3)	16	4	2012.91068	2012.90974	95	2+4 RR(26,15)	27	16	2015.02424	2015.02426	-2
225 RR(50,33)	51	34	2012.91068	2012.91326	-258	2+4 RR(24, 9)	25	10	2015.03590	2015.03684	-94
225 RR(51,30)	52	31	2012.94828W	2012.95199	-372	2+4 PR(18, 6)	19	5	2015.05567	2015.05525	42
2+4 RR(14, 0)	15	1	2012.96385	2012.96350	36	2+4 RR(27,18)	28	19	2015.06189	2015.06210	-21
2+4 RR(21,21)	22	22	2012.99571	2012.99600	-30	2+4 RR(23, 6)	24	7	2015.07611	2015.07630	-18
2+4 PR(13, 3)	14	2	2013.03633	2013.03596	37	2+4 RR(22, 3)	23	4	2015.13282	2015.13246	36
2+4 RR(19,12)	20	13	2013.14993	2013.15043	-50	2+4 RR(28,21)	29	22	2015.13898	2015.13880	17
2+4 RR(18, 9)	19	10	2013.15781	2013.15823	-42	2+4 RR(29,27)	30	28	2015.15018	2015.14877	141
2+4 RR(20,15)	21	16	2013.16774	2013.16835	-61	2+4 PR(17, 9)	18	8	2015.15018	2015.15098	-80
225 RR(51,33)	52	34	2013.16774	2013.16897	-122	2+4 RR(21, 0)	22	1	2015.19479	2015.19441	38
2+4 RR(17, 6)	18	7	2013.18621	2013.18681	-60	2+4 RR(29,24)	30	25	2015.26426	2015.26319	107
225 RR(52,30)	53	31	2013.20975W	2013.20496	479	2+4 PR(20, 3)	21	2	2015.28295	2015.28314	-18
2+4 RR(21,18)	22	19	2013.21784	2013.21813	-29	2+4 RR(26,12)	27	13	2015.32293	2015.32319	-26
2+4 RR(16, 3)	17	4	2013.23239	2013.23226	13	2+4 RR(27,15)	28	16	2015.32771	2015.32764	7
2+4 RR(15, 0)	16	1	2013.28747	2013.28727	20	2+4 RR(25, 9)	26	10	2015.34372	2015.34407	-35
2+4 RR(22,21)	23	22	2013.30743	2013.30727	16	2+4 RR(28,18)	29	19	2015.36320	2015.36346	-26
2+4 PR(14, 3)	15	2	2013.36233	2013.36194	39	2+4 PR(19, 6)	20	5	2015.37453	2015.37303	150
225 RR(52,33)	53	34	2013.42754W	2013.42283	471	2+4 RR(24, 6)	25	7	2015.38520	2015.38536	-16
2+4 RR(20,12)	21	13	2013.46544	2013.46588	-44	2+4 RR(30,30)	31	31	2015.40212	2015.40113	99
2+4 RR(19, 9)	20	10	2013.47551	2013.47552	-1	2+4 RR(29,21)	30	22	2015.43835	2015.43804	30
2+4 RR(21,15)	22	16	2013.48150	2013.48190	-41	2+4 RR(23, 3)	24	4	2015.44551	2015.44333	218
2+4 RR(18, 6)	19	7	2013.50643	2013.50590	53	2+4 RR(30,27)	31	28	2015.44551	2015.44519	33
2+4 PR(12, 9)	13	8	2013.52928	2013.52889	39	2+4 RR(22, 0)	23	1	2015.50675	2015.50635	40
2+4 RR(22,18)	23	19	2013.52928	2013.52972	-44	2+4 RR(30,24)	31	25	2015.56111	2015.56020	91
2+4 RR(17, 3)	18	4	2013.55301	2013.55312	-11	2+4 PR(21, 3)	22	2	2015.59781	2015.59755	26
2+4 RR(16, 0)	17	1	2013.60969	2013.60935	34	2+4 RR(27,12)	28	13	2015.62731	2015.62684	47
2+4 RR(23,21)	24	22	2013.61702	2013.61682	20	2+4 RR(28,15)	29	16	2015.62731	2015.62933	-202
225 RR(55,27)	56	28	2013.67016	2013.67057	-41	2+4 RR(26, 9)	27	10	2015.64930	2015.64962	-32
225 RR(53,33)	54	34	2013.67676	2013.67485	191	2+4 RR(29,18)	30	19	2015.66290	2015.66311	-21
2+4 PR(15, 3)	16	2	2013.68683	2013.68627	56	2+4 RR(25, 6)	26	7	2015.69366	2015.69274	92
2+4 RR(24,24)	25	25	2013.75302	2013.75211	91	2+4 RR(31,30)	32	31	2015.69366	2015.69510	-144
2+4 PR(14, 6)	15	5	2013.76795	2013.76763	32	2+4 RR(30,21)	31	22	2015.73576	2015.73557	19
2+4 RR(21,12)	22	13	2013.77790	2013.77964	-174	2+4 RR(31,27)	32	28	2015.74125	2015.73985	140
2+4 RR(20, 9)	21	10	2013.79164	2013.79114	50	2+4 RR(24, 3)	25	4	2015.75263	2015.75253	10
2+4 RR(22,15)	23	16	2013.79164	2013.79376	-213	2+4 RR(23, 0)	24	1	2015.81689	2015.81659	30
2+4 RR(19, 6)	20	7	2013.82314	2013.82332	-18	2+4 RR(31,24)	32	25	2015.85642	2015.85548	94
2+4 RR(23,18)	24	19	2013.83935	2013.83961	-25	2+4 PR(18,12)	19	11	2015.89292	2015.89359	-68
2+4 RR(18, 3)	19	4	2013.87239	2013.87232	7	2+4 PR(22, 3)	23	2	2015.91042	2015.91031	12
2+4 RR(24,21)	25	22	2013.92475	2013.92466	10	2+4 RR(28,12)	29	13	2015.92856	2015.92881	-25
2+4 RR(17, 0)	18	1	2013.93105	2013.92974	131	2+4 RR(29,15)	30	16	2015.92856	2015.92933	-77
2+4 PR(16, 3)	17	2	2014.00837	2014.00895	-58	2+4 RR(27, 9)	28	10	2015.95328	2015.95349	-21
2+4 RR(25,24)	26	25	2014.05858	2014.05779	78	2+4 RR(30,18)	31	19	2015.96063	2015.96106	-43
2+4 RR(22,12)	23	13	2014.09041	2014.09173	-132	2+4 RR(32,30)	33	31	2015.98816	2015.98729	87
2+4 PR(15, 6)	16	5	2014.09041	2014.09201	-160	2+4 RR(26, 6)	27	7	2015.99833	2015.99845	-11
2+4 RR(23,15)	24	16	2014.10378	2014.10393	-15	2+4 RR(31,21)	32	22	2016.03238	2016.03137	101
2+4 RR(21, 9)	22	10	2014.10378	2014.10508	-130	2+4 RR(32,27)	33	28	2016.03238	2016.03277	-39
2+4 RR(20, 6)	21	7	2014.13877	2014.13908	-30	2+4 RR(25, 3)	26	4	2016.05994	2016.06007	-12
2+4 RR(24,18)	25	19	2014.14747	2014.14779	-31	2+4 PR(20, 9)	21	8	2016.10673	2016.10446	227
2+4 RR(19, 3)	20	4	2014.19016	2014.18985	31	2+4 RR(24, 0)	25	1	2016.12548	2016.12515	34
2+4 RR(25,21)	26	22	2014.23088	2014.23077	11	2+4 RR(32,24)	33	25	2016.14989	2016.14903	86
2+4 RR(18, 0)	19	1	2014.24885	2014.24844	41	2+4 PR(19,12)	20	11	2016.21124	2016.21146	-23
2+4 PR(17, 3)	18	2	2014.33026	2014.32998	28	2+4 PR(23, 3)	24	2	2016.22182	2016.22141	41
2+4 RR(26,24)	27	25	2014.36258	2014.36174	83	2+4 RR(30,15)	31	16	2016.22792	2016.22762	30
2+4 RR(23,12)	24	13	2014.40162	2014.40212	-50	2+4 RR(29,12)	30	13	2016.22792	2016.22908	-116
2+4 RR(24,15)	25	16	2014.41190	2014.41240	-50	2+4 RR(28, 9)	29	10	2016.25611	2016.25568	43
2+4 RR(22, 9)	23	10	2014.41761	2014.41734	27	2+4 RR(31,18)	32	19	2016.25611	2016.25730	-119
2+4 RR(21, 6)	22	7	2014.45348	2014.45316	33	2+4 RR(33,30)	34	31	2016.27846	2016.27771	75
2+4 RR(25,18)	26	19	2014.45348	2014.45426	-78	2+4 RR(27, 6)	28	7	2016.30282	2016.30248	35
2+4 RR(20, 3)	21	4	2014.50544	2014.50572	-29	2+4 RR(33,33)	34	34	2016.30967	2016.31182	-215
2+4 RR(26,21)	27	22	2014.53461	2014.53517	-55	2+4 RR(32,27)	34	28	2016.32532	2016.32393	139
2+4 RR(27,27)	28	28	2014.55213	2014.55068	144	2+4 RR(33,21)	33	22	2016.32532	2016.32546	-14
2+4 RR(19, 0)	20	1	2014.56565	2014.56545	19	2+4 RR(26, 3)	27	4	2016.36623	2016.36593	30
2+4 PR(18, 3)	19	2	2014.64960	2014.64935	25	2+4 PR(21, 9)	22	8	2016.42033	2016.41899	134
2+4 RR(27,24)	28	25	2014.66456	2014.66396	61	2+4 RR(25, 0)	26	1	2016.43221	2016.43201	20
2+4 RR(24,12)	25	13	2014.71021	2014.71083	-62	2+4 RR(33,24)	34	25	2016.44147	2016.44085	62
2+4 RR(25,15)	26	16	2014.71864	2014.71918	-54	2+4 RR(31,15)	32	16	2016.52520	2016.52423	97
2+4 RR(23, 9)	24	10	2014.72737	2014.72793	-56	2+4 RR(30,12)	31	13	2016.52520	2016.52767	-247
2+4 PR(17, 6)	18	5	2014.73649	2014.73582	67	2+4 RR(32,18)	33	19	2016.55158	2016.55183	-25
2+4 RR(26,18)	27	19	2014.75888	2014.75903	-15	2+4 RR(29, 9)	30	10	2016.55647	2016.55619	29
2+4 RR(22, 6)	23	7	2014.76541	2014.76556	-15	2+4 RR(34,30)	35	31	2016.56714	2016.56636	78
2+4 RR(21, 3)	22	4	2014.82013	2014.81992	20	2+4 RR(34,33)	35	34	2016.59723	2016.59963	-240
2+4 RR(27,21)	28	22	2014.83797	2014.83784	12	2+4 RR(28, 6)	29	7	2016.60441	2016.60483	-42
2+4 RR(28,27)	29	28	2014.85208	2014.85060	148	2+4 RR(34,27)	35	28	2016.61599	2016.61335	264
2+4 RR(20, 0)	21	1	2014.88128	2014.88078	50	2+4 RR(33,21)	34	22	2016.61599	2016.61782	-183
2+4 PR(15,12)	16	11	2014.92917	2014.93011	-94	2+4 PR(23, 6)	24	5	2016.62735	2016.62762	-27

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
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5	2+4 RR(27, 3)	28 4	2016.67011	2016.67013	-2	2+4 RR(37, 15)	38 16	2018.26779	2018.26821	-42
6	2+4 RR(34, 24)	35 25	2016.73202	2016.73093	110	2+4 RR(38, 18)	39 19	2018.28364	2018.28320	45
7	2+4 PR(22, 9)	23 8	2016.73202	2016.73186	16	2+4 RR(36, 12)	37 13	2018.28364	2018.28375	-11
8	2+4 RR(26, 0)	27 1	2016.73834	2016.73717	116	2+4 RR(40, 27)	41 28	2018.31428	2018.31310	118
9	2+4 RR(32, 15)	33 16	2016.81877	2016.81913	-36	2+4 RR(35, 9)	36 10	2018.32383	2018.32395	-13
10	2+4 RR(31, 12)	32 13	2016.82433	2016.82457	-24	2+4 RR(39, 21)	40 22	2018.33653	2018.33594	59
11	2+4 RR(33, 18)	34 19	2016.84395	2016.84466	-71	2+4 PR(30, 3)	31 2	2018.35279	2018.35272	7
12	2+4 RR(35, 30)	36 31	2016.85406	2016.85324	82	2+4 RR(34, 6)	35 7	2018.38369	2018.38365	3
13	2+4 RR(30, 9)	31 10	2016.85406	2016.85502	-96	2+4 RR(40, 24)	41 25	2018.43572	2018.43504	68
14	2+4 RR(35, 33)	36 34	2016.88282	2016.88564	-282	2+4 PR(29, 6)	30 5	2018.46020	2018.45987	33
15	2+4 RR(35, 27)	36 28	2016.90321	2016.90101	220	2+4 RR(33, 3)	34 4	2018.46020	2018.46024	-5
16	2+4 RR(29, 6)	30 7	2016.90321	2016.90550	-229	2+4 PR(25, 15)	26 14	2018.51458	2018.51428	30
17	2+4 RR(34, 21)	35 22	2016.90833	2016.90847	-14	2+4 RR(32, 0)	33 1	2018.53335	2018.53257	78
18	2+4 PR(24, 6)	25 5	2016.93724	2016.93713	11	2+4 RR(41, 30)	42 31	2018.53771	2018.53738	32
19	2+4 RR(28, 3)	29 4	2016.97304	2016.97266	39	2+4 RR(38, 15)	39 16	2018.55257	2018.55293	-37
20	2+4 RR(35, 24)	36 25	2017.02006	2017.01928	78	2+4 RR(41, 33)	42 34	2018.56095W	2018.56413	-318
21	2+4 RR(27, 0)	28 1	2017.04091	2017.04064	27	2+4 RR(39, 18)	40 19	2018.56569	2018.56578	-10
22	2+4 RR(33, 15)	34 16	2017.11186	2017.11234	-48	2+4 RR(37, 12)	38 13	2018.57094	2018.57052	42
23	2+4 RR(32, 12)	33 13	2017.11940	2017.11978	-39	2+4 RR(41, 27)	42 28	2018.59123	2018.59028	95
24	2+4 RR(34, 18)	35 19	2017.13670	2017.13578	92	2+4 RR(36, 9)	37 10	2018.61370	2018.61270	101
25	2+4 RR(36, 30)	37 31	2017.13670	2017.13835	-165	2+4 RR(40, 21)	41 22	2018.61370	2018.61628	-257
26	2+4 PR(26, 3)	27 2	2017.14547	2017.14477	70	2+4 PR(31, 3)	32 2	2018.65072	2018.65057	15
27	2+4 RR(31, 9)	32 10	2017.15192	2017.15217	-25	2+4 RR(35, 6)	36 7	2018.67418	2018.67423	-5
28	2+4 RR(36, 33)	37 34	2017.16735	2017.16987	-252	2+4 PR(27, 12)	28 11	2018.69527	2018.69506	21
29	2+4 RR(36, 27)	37 28	2017.18802	2017.18693	109	2+4 RR(41, 24)	42 25	2018.71347	2018.71300	47
30	2+4 RR(35, 21)	36 22	2017.19784	2017.19740	44	2+4 RR(34, 3)	35 4	2018.75303	2018.75275	28
31	2+4 RR(30, 6)	31 7	2017.20418	2017.20450	-32	2+4 PR(30, 6)	31 5	2018.75963	2018.75945	18
32	2+4 PR(25, 6)	26 5	2017.24421	2017.24499	-78	2+4 RR(42, 30)	43 31	2018.81225	2018.81189	36
33	2+4 PR(21, 15)	22 14	2017.27362	2017.27232	130	2+4 RR(33, 0)	34 1	2018.82600	2018.82586	14
34	2+4 RR(29, 3)	30 4	2017.27362	2017.27351	11	2+4 RR(39, 15)	40 16	2018.83486	2018.83596	-110
35	2+4 RR(36, 24)	37 25	2017.30665	2017.30589	76	2+4 RR(42, 33)	43 34	2018.83486	2018.83762	-276
36	2+4 RR(28, 0)	29 1	2017.34276	2017.34242	34	2+4 RR(40, 18)	41 19	2018.84628	2018.84667	-39
37	2+4 RR(34, 15)	35 16	2017.40337	2017.40385	-48	2+4 RR(38, 12)	39 13	2018.85553	2018.85560	-7
38	2+4 RR(33, 12)	34 13	2017.41242	2017.41331	-89	2+4 RR(42, 27)	43 28	2018.86668	2018.86571	97
39	2+4 RR(37, 30)	38 31	2017.42321	2017.42169	152	2+4 PR(29, 9)	30 8	2018.87707	2018.87575	132
40	2+4 RR(35, 18)	36 19	2017.42321	2017.42519	-198	2+4 RR(41, 21)	42 22	2018.89530	2018.89490	40
41	2+4 RR(32, 9)	33 10	2017.44851	2017.44764	88	2+4 RR(37, 9)	38 10	2018.90032	2018.89976	56
42	2+4 PR(27, 3)	28 2	2017.44851	2017.44924	-73	2+4 PR(32, 3)	33 2	2018.94701	2018.94675	26
43	2+4 RR(37, 33)	38 34	2017.44851W	2017.45230	-379	2+4 RR(36, 6)	37 7	2018.96302	2018.96312	-11
44	2+4 RR(23, 12)	24 11	2017.46645	2017.46645	-1	2+4 RR(42, 24)	43 25	2018.98986	2018.98923	63
45	2+4 RR(37, 27)	38 28	2017.47228	2017.47109	118	2+4 PR(28, 12)	29 11	2018.99798	2018.99808	-10
46	2+4 RR(36, 21)	37 22	2017.48489	2017.48461	28	2+4 RR(35, 3)	36 4	2019.04378	2019.04359	20
47	2+4 RR(31, 6)	32 7	2017.50158	2017.50181	-23	2+4 PR(31, 6)	32 5	2019.05750	2019.05738	12
48	2+4 PR(26, 6)	27 5	2017.55178	2017.55119	59	2+4 RR(43, 30)	44 31	2019.08465	2019.08464	1
49	2+4 RR(30, 3)	31 4	2017.57281	2017.57270	11	2+4 RR(40, 15)	41 16	2019.11715	2019.11729	-14
50	2+4 RR(37, 24)	38 25	2017.59137	2017.59078	60	2+4 RR(34, 0)	35 1	2019.11715	2019.11746	-31
51	2+4 RR(29, 0)	30 1	2017.64272	2017.64250	21	2+4 PR(27, 15)	28 14	2019.12606	2019.12537	69
52	2+4 RR(35, 15)	36 16	2017.69326	2017.69367	-41	2+4 RR(41, 18)	42 19	2019.12606	2019.12584	21
53	2+4 RR(38, 30)	39 31	2017.70426	2017.70326	100	2+4 RR(39, 12)	40 13	2019.13936	2019.13899	37
54	2+4 RR(34, 12)	35 13	2017.70426	2017.70514	-88	2+4 RR(43, 27)	44 28	2019.13936	2019.13939	-3
55	2+4 RR(36, 18)	37 19	2017.71254	2017.71290	-36	2+4 RR(42, 21)	43 22	2019.17160	2019.17181	-21
56	2+4 RR(38, 33)	39 34	2017.73021	2017.73294	-272	2+4 RR(38, 9)	39 10	2019.18482	2019.18514	-31
57	2+4 RR(33, 9)	34 10	2017.74109	2017.74142	-33	2+4 PR(33, 3)	34 2	2019.24171	2019.24128	43
58	2+4 PR(28, 3)	29 2	2017.75371	2017.75206	165	2+4 RR(37, 6)	38 7	2019.25026	2019.25033	-7
59	2+4 RR(38, 27)	39 28	2017.75371	2017.75351	20	2+4 RR(43, 24)	44 25	2019.26424	2019.26373	51
60	2+4 RR(37, 21)	38 22	2017.77025	2017.77010	15	2+4 PR(29, 12)	30 11	2019.29933	2019.29945	-12
	2+4 RR(32, 6)	33 7	2017.79745	2017.79744	1	2+4 RR(36, 3)	37 4	2019.33302	2019.33275	27
	2+4 PR(27, 6)	28 5	2017.85600	2017.85574	26	2+4 PR(32, 6)	33 5	2019.35487	2019.35364	123
	2+4 RR(31, 3)	32 4	2017.87056	2017.87022	34	2+4 RR(44, 30)	45 31	2019.35487	2019.35562	-75
	2+4 RR(38, 24)	39 25	2017.87515	2017.87393	122	2+4 RR(44, 33)	45 34	2019.37601W	2019.37924	-322
	2+4 RR(30, 0)	31 1	2017.94136	2017.94089	47	2+4 RR(41, 15)	42 16	2019.39619	2019.39693	-74
	2+4 PR(26, 9)	27 8	2017.96829	2017.96686	143	2+4 RR(42, 18)	43 19	2019.40337	2019.40332	5
	2+4 RR(36, 15)	37 16	2017.98217	2017.98179	38	2+4 RR(44, 27)	45 28	2019.41251	2019.41133	117
	2+4 RR(39, 30)	40 31	2017.98217	2017.98307	-90	2+4 RR(40, 12)	41 13	2019.42028	2019.42069	-41
	2+4 RR(35, 12)	36 13	2017.99620	2017.99529	91	2+4 PR(28, 15)	29 14	2019.42804	2019.42844	-40
	2+4 RR(37, 18)	38 19	2017.99620	2017.99890	-270	2+4 RR(43, 21)	44 22	2019.44712	2019.44700	12
	2+4 RR(39, 33)	40 34	2018.00888	2018.01179	-291	2+4 RR(39, 9)	40 10	2019.46873	2019.46883	-10
	2+4 RR(34, 9)	35 10	2018.03411	2018.03353	59	2+4 PR(34, 3)	35 2	2019.53574	2019.53415	159
	2+4 RR(39, 27)	40 28	2018.03411	2018.03418	-7	2+4 RR(38, 6)	39 7	2019.53574	2019.53584	-11
	2+4 PR(29, 3)	30 2	2018.05382	2018.05322	60	2+4 RR(44, 24)	45 25	2019.53574	2019.53650	-77
	2+4 RR(38, 21)	39 22	2018.05382	2018.05388	-5	2+4 PR(27, 18)	28 17	2019.56081	2019.56150	-69
	2+4 PR(25, 12)	26 11	2018.08517	2018.08406	111	2+4 PR(30, 12)	31 11	2019.59932	2019.59917	16
	2+4 RR(33, 6)	34 7	2018.09134	2018.09139	-5	2+4 RR(37, 3)	38 4	2019.62053	2019.62025	28
	2+4 RR(39, 24)	40 25	2018.15648	2018.15535	113	2+4 RR(45, 30)	46 31	2019.62545	2019.62484	61
	2+4 RR(32, 3)	33 4	2018.16633	2018.16607	26	2+4 RR(45, 33)	46 34	2019.64451	2019.64737	-287
	2+4 PR(24, 15)	25 14	2018.20664	2018.20626	38	2+4 PR(33, 6)	34 5	2019.64903	2019.64825	78
	2+4 RR(31, 0)	32 1	2018.23766	2018.23757	8	2+4 RR(42, 15)	43 16	2019.67465	2019.67487	-22
	2+4 RR(40, 30)	41 31	2018.26155	2018.26111	44	2+4 RR(43, 18)	44 19	2019.68033	2019.67908	125

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2+4	RR(45,27)	46	28	2019.68033	2019.68153	-120		2+4	RR(50,30)	51	31	2020.94463	2020.94455	8					
2+4	RR(36, 0)	37	1	2019.69612	2019.69557	55		2+4	RR(50,33)	51	34	2020.95763W	2020.96135	-372					
2+4	RR(41,12)	42	13	2019.70102	2019.70071	31		2+4	PR(39, 3)	40	2	2020.97481	2020.97363	118					
2+4	RR(44,21)	45	22	2019.72044	2019.72047	-3		2+4	RR(50,27)	51	28	2021.00679	2021.00640	39					
2+4	PR(29,15)	30	14	2019.72979	2019.72986	-7		2+4	RR(48,18)	49	19	2021.03257	2021.03235	22					
2+4	RR(40, 9)	41	10	2019.75103	2019.75085	18		2+4	RR(42, 3)	43	4	2021.03257	2021.03267	-10					
2+4	PR(32, 9)	33	8	2019.77053	2019.76975	78		2+4	RR(47,15)	48	16	2021.03898	2021.03912	-14					
2+4	RR(45,24)	46	25	2019.80800	2019.80755	45		2+4	PR(32,18)	33	17	2021.06155	2021.06055	100					
2+4	RR(39, 6)	40	7	2019.81984	2019.81967	17		2+4	RR(49,21)	50	22	2021.06155	2021.06214	-59					
2+4	PR(35, 3)	36	2	2019.82584	2019.82536	48		2+4	PR(35,12)	36	11	2021.07451	2021.07296	154					
2+4	PR(28,18)	29	17	2019.86455	2019.86461	-6		2+4	RR(46,12)	47	13	2021.07451	2021.07545	-94					
2+4	RR(46,30)	47	31	2019.89246	2019.89230	16		2+4	PR(38, 6)	39	5	2021.09646	2021.09644	2					
2+4	RR(38, 3)	39	4	2019.90765	2019.90607	158		2+4	RR(41, 0)	42	1	2021.11149	2021.11112	37					
2+4	RR(46,33)	47	34	2019.90765W	2019.91373	-608		2+4	RR(45, 9)	46	10	2021.13635	2021.13572	63					
2+4	PR(34, 6)	35	5	2019.94155	2019.94121	34		2+4	RR(50,24)	51	25	2021.13635	2021.13687	-52					
2+4	RR(46,27)	47	28	2019.95115	2019.94999	117		2+4	RR(51,30)	52	31	2021.20305	2021.20323	-17					
2+4	RR(43,15)	44	16	2019.95115	2019.95111	4		2+4	PR(34,15)	35	14	2021.21357	2021.21220	137					
2+4	RR(44,18)	45	19	2019.95115	2019.95315	-199		2+4	RR(44, 6)	45	7	2021.21357	2021.21339	18					
2+4	RR(42,12)	43	13	2019.97986	2019.97903	83		2+4	RR(51,33)	52	34	2021.21357W	2021.21882	-525					
2+4	RR(37, 0)	38	1	2019.97986	2019.98207	-221		2+4	PR(37, 9)	38	8	2021.22687	2021.22665	22					
2+4	RR(45,21)	46	22	2019.99217	2019.99223	-7		2+4	PR(40, 3)	41	2	2021.25647	2021.25655	-8					
2+4	PR(30,15)	31	14	2020.03070	2020.02963	107		2+4	RR(51,27)	52	28	2021.26656	2021.26615	40					
2+4	RR(41, 9)	42	10	2020.03070	2020.03119	-49		2+4	RR(49,18)	50	19	2021.29765	2021.29790	-25					
2+4	PR(33, 9)	34	8	2020.06502	2020.06444	58		2+4	RR(48,15)	49	16	2021.30869	2021.30689	180					
2+4	RR(46,24)	47	25	2020.07745	2020.07686	59		2+4	RR(43, 3)	44	4	2021.30869	2021.31015	-146					
2+4	RR(40, 6)	41	7	2020.10186	2020.10180	6		2+4	RR(50,21)	51	22	2021.32532	2021.32533	-1					
2+4	PR(36, 3)	37	2	2020.11513	2020.11492	21		2+4	RR(47,12)	48	13	2021.34514	2021.34533	-20					
2+4	RR(47,30)	48	31	2020.15779	2020.15800	-22		2+4	PR(33,18)	34	17	2021.35510	2021.35541	-31					
2+4	RR(47,33)	48	34	2020.17497W	2020.17830	-334		2+4	PR(36,12)	37	11	2021.36315	2021.36276	38					
2+4	RR(39, 3)	40	4	2020.19298	2020.19023	275		2+4	PR(39, 6)	40	5	2021.38136	2021.38110	26					
2+4	PR(32,12)	33	11	2020.19298	2020.19365	-67		2+4	RR(42, 0)	43	1	2021.38921	2021.38914	7					
2+4	RR(47,27)	48	28	2020.21777	2020.21670	107		2+4	RR(51,24)	52	25	2021.39797	2021.39757	41					
2+4	RR(45,18)	46	19	2020.22530	2020.22550	-21		2+4	RR(46, 9)	47	10	2021.40727	2021.40765	-38					
2+4	RR(44,15)	45	16	2020.22530	2020.22566	-36		2+4	RR(52,30)	53	31	2021.45932	2021.46015	-82					
2+4	PR(35, 6)	36	5	2020.23251	2020.23250	1		2+4	RR(52,33)	53	34	2021.47061W	2021.47451	-389					
2+4	RR(43,12)	44	13	2020.25564	2020.25567	-3		2+4	RR(45, 6)	46	7	2021.48697	2021.48704	-7					
2+4	RR(46,21)	47	22	2020.26249	2020.26228	21		2+4	PR(35,15)	36	14	2021.50288	2021.50371	-83					
2+4	RR(38, 0)	39	1	2020.26738	2020.26688	50		2+4	PR(38, 9)	39	8	2021.51313	2021.51306	8					
2+4	RR(42, 9)	43	10	2020.30970	2020.30984	-14		2+4	RR(52,27)	53	28	2021.52460	2021.52417	43					
2+4	PR(31,15)	32	14	2020.32745	2020.32775	-31		2+4	PR(41, 3)	42	2	2021.53792	2021.53782	10					
2+4	RR(47,24)	48	25	2020.34476	2020.34445	31		2+4	RR(50,18)	51	19	2021.56223	2021.56174	49					
2+4	PR(34, 9)	35	8	2020.35760	2020.35748	13		2+4	RR(49,15)	50	16	2021.57297	2021.57296	1					
2+4	RR(41, 6)	42	7	2020.38237	2020.38224	13		2+4	RR(44, 3)	45	4	2021.58646	2021.58595	51					
2+4	PR(37, 3)	38	2	2020.40299	2020.40281	18		2+4	RR(51,21)	52	22	2021.58646	2021.58682	-35					
2+4	RR(48,30)	49	31	2020.42172	2020.42194	-22		2+4	RR(48,12)	49	13	2021.61336	2021.61353	-17					
2+4	RR(48,33)	49	34	2020.43723W	2020.44109	-386		2+4	PR(34,18)	35	17	2021.65026	2021.64862	164					
2+4	RR(40, 3)	41	4	2020.47294	2020.47271	23		2+4	PR(37,12)	38	11	2021.65026	2021.65091	-64					
2+4	RR(48,27)	49	28	2020.48214	2020.48167	48		2+4	RR(52,24)	53	25	2021.65700	2021.65654	46					
2+4	PR(33,12)	34	11	2020.48930	2020.48841	89		2+4	PR(40, 6)	41	5	2021.66483	2021.66411	71					
2+4	RR(46,18)	47	19	2020.49674	2020.49616	58		2+4	RR(43, 0)	44	1	2021.66483	2021.66545	-63					
2+4	RR(45,15)	46	16	2020.49674	2020.49851	-177		2+4	RR(47, 9)	48	10	2021.67790	2021.67790	0					
2+4	PR(36, 6)	37	5	2020.52273	2020.52214	59		2+4	RR(53,30)	54	31	2021.71472	2021.71532	-59					
2+4	RR(47,21)	48	22	2020.53022	2020.53061	-39		2+4	RR(53,33)	54	34	2021.72293W	2021.72843	-549					
2+4	RR(44,12)	45	13	2020.53022	2020.53062	-39		2+4	RR(46, 6)	47	7	2021.75912	2021.75899	13					
2+4	RR(39, 0)	40	1	2020.55013	2020.54999	13		2+4	RR(53,27)	54	28	2021.78083	2021.78046	37					
2+4	RR(43, 9)	44	10	2020.58675	2020.58681	-6		2+4	PR(42, 3)	43	2	2021.81723	2021.81743	-20					
2+4	RR(48,24)	49	25	2020.61038	2020.61032	6		2+4	RR(51,18)	52	19	2021.82390	2021.82388	2					
2+4	PR(32,15)	33	14	2020.62439	2020.62422	17		2+4	RR(50,15)	51	16	2021.83686	2021.83734	-48					
2+4	PR(35, 9)	36	8	2020.64901															

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
1											
2											
3											
4											
5	2+4 RR(55,30)	56 31	2022.22014	2022.22041	-27	2+4 RR(54, 9)	55 10	2023.52363	2023.52268	95	
6	2+4 PR(42, 6)	43 5	2022.22535	2022.22515	20	2+4 PR(39,21)	40 20	2023.53209	2023.53151	59	
7	2+4 RR(55,27)	56 28	2022.28781	2022.28783	-2	2+4 RR(50, 0)	51 1	2023.55116	2023.55215	-98	
8	2+4 RR(48, 6)	49 7	2022.29811	2022.29779	32	2+4 PR(47, 6)	48 5	2023.59853	2023.59873	-20	
9	2+4 RR(53,18)	54 19	2022.34297	2022.34306	-8	2+4 RR(58,18)	59 19	2023.61469W	2023.61127	341	
10	2+4 RR(54,21)	55 22	2022.36096	2022.36101	-5	2+4 RR(53, 6)	54 7	2023.61469	2023.61488	-20	
11	2+4 RR(52,15)	53 16	2022.36096	2022.36101	-5	2+4 RR(59,21)	60 22	2023.61469	2023.61718	-249	
12	2+4 PR(41, 9)	42 8	2022.36096	2022.36235	-139	2+4 PR(44,12)	45 11	2023.62315	2023.62157	158	
13	2+4 PR(44, 3)	45 2	2022.37036	2022.37167	-132	2+4 RR(57,15)	58 16	2023.64013	2023.64059	-46	
14	2+4 PR(35,21)	36 20	2022.38147	2022.38162	-15	2+4 PR(41,18)	42 17	2023.65488	2023.65487	1	
15	2+4 RR(47, 3)	48 4	2022.40403	2022.40336	67	2+4 RR(56,12)	57 13	2023.69830	2023.69839	-10	
16	2+4 RR(51,12)	52 13	2022.40863	2022.40800	63	2+4 PR(49, 3)	50 2	2023.72831	2023.72830	1	
17	2+4 RR(55,24)	56 25	2022.42314	2022.42313	1	2+4 RR(52, 3)	53 4	2023.73221	2023.73236	-15	
18	2+4 RR(56,30)	57 31	2022.46937	2022.47033	-95	2+4 RR(55, 9)	56 10	2023.77832	2023.77952	-120	
19	2+4 RR(50, 9)	51 10	2022.47781	2022.47859	-77	2+4 PR(40,21)	41 20	2023.81481	2023.81485	-4	
20	2+4 RR(46, 0)	47 1	2022.48487	2022.48422	65	2+4 RR(51, 0)	52 1	2023.81481	2023.81488	-7	
21	2+4 PR(43, 6)	44 5	2022.50415	2022.50318	96	2+4 RR(59,18)	60 19	2023.86057	2023.85983	74	
22	2+4 PR(40,12)	41 11	2022.50415	2022.50541	-126	2+4 RR(60,21)	61 22	2023.86057	2023.86330	-273	
23	2+4 PR(37,18)	38 17	2022.51833	2022.51835	-2	2+4 PR(48, 6)	49 5	2023.86853	2023.86847	5	
24	2+4 RR(56,27)	57 28	2022.53874	2022.53892	-18	2+4 RR(58,15)	59 16	2023.89201	2023.89143	58	
25	2+4 RR(49, 6)	50 7	2022.56359	2022.56462	-103	2+4 PR(42,18)	43 17	2023.93231	2023.93487	-256	
26	2+4 RR(54,18)	55 19	2022.59962	2022.60010	-48	2+4 RR(57,12)	58 13	2023.95077	2023.95142	-65	
27	2+4 RR(55,21)	56 22	2022.61580	2022.61565	15	2+4 PR(50, 3)	51 2	2023.99417	2023.99466	-49	
28	2+4 RR(53,15)	54 16	2022.62030	2022.62031	-1	2+4 RR(62,27)	63 28	2024.00817	2024.00919	-103	
29	2+4 PR(42, 9)	43 8	2022.64108	2022.64213	-105	2+4 RR(56, 9)	57 10	2024.03528	2024.03468	60	
30	2+4 PR(45, 3)	46 2	2022.64719	2022.64631	88	2+4 PR(44,15)	45 14	2024.05287	2024.05294	-7	
31	2+4 PR(39,15)	40 14	2022.65372	2022.65323	48	2+4 RR(52, 0)	53 1	2024.07587	2024.07593	-5	
32	2+4 RR(52,12)	53 13	2022.67129	2022.66945	184	2+4 PR(41,21)	42 20	2024.09633	2024.09655	-21	
33	2+4 PR(36,21)	37 20	2022.67129	2022.67156	-27	2+4 RR(60,18)	61 19	2024.10658	2024.10668	-10	
34	2+4 RR(48, 3)	49 4	2022.67129	2022.67249	-120	2+4 RR(61,21)	62 22	2024.10658	2024.10772	-114	
35	2+4 RR(57,30)	58 31	2022.71773	2022.71851	-78	2+4 RR(55, 6)	56 7	2024.13002	2024.12973	29	
36	2+4 RR(51, 9)	52 10	2022.74118	2022.74212	-94	2+4 PR(49, 6)	50 5	2024.13644	2024.13656	-12	
37	2+4 RR(47, 0)	48 1	2022.75345	2022.75375	-30	2+4 RR(59,15)	60 16	2024.14042	2024.14059	-17	
38	2+4 PR(44, 6)	45 5	2022.77931	2022.77955	-25	2+4 PR(46,12)	47 11	2024.16904	2024.16972	-68	
39	2+4 PR(41,12)	42 11	2022.78769	2022.78693	76	2+4 RR(58,12)	59 13	2024.20248	2024.20276	-28	
40	2+4 PR(57,27)	58 28	2022.78769	2022.78828	-59	2+4 PR(43,18)	44 17	2024.21317	2024.21321	-4	
41	2+4 PR(38,18)	39 17	2022.80649	2022.80496	153	2+4 RR(54, 3)	55 4	2024.25365	2024.25229	136	
42	2+4 RR(50, 6)	51 7	2022.82935	2022.82976	-40	2+4 PR(51, 3)	52 2	2024.26015	2024.25937	78	
43	2+4 RR(55,18)	56 19	2022.85530	2022.85544	-14	2+4 RR(57, 9)	58 10	2024.28836	2024.28818	19	
44	2+4 RR(56,21)	57 22	2022.86846	2022.86859	-13	2+4 RR(53, 0)	54 1	2024.33565	2024.33527	38	
45	2+4 RR(54,15)	55 16	2022.87682	2022.87792	-110	2+4 RR(61,18)	62 19	2024.35090	2024.35185	-95	
46	2+4 PR(46, 3)	47 2	2022.91930	2022.91929	1	2+4 RR(56, 6)	57 7	2024.38564	2024.38457	107	
47	2+4 PR(43, 9)	44 8	2022.91930	2022.92026	-97	2+4 RR(60,15)	61 16	2024.38564	2024.38806	-242	
48	2+4 RR(57,24)	58 25	2022.92761	2022.92560	201	2+4 PR(50, 6)	51 5	2024.40166	2024.40299	-133	
49	2+4 RR(53,12)	54 13	2022.92761	2022.92921	-160	2+4 PR(47,12)	48 11	2024.44228	2024.44132	96	
50	2+4 RR(49, 3)	50 4	2022.93873	2022.93996	-123	2+4 RR(59,12)	60 13	2024.45263	2024.45242	21	
51	2+4 RR(58,30)	59 31	2022.96533	2022.96494	38	2+4 RR(55, 3)	56 4	2024.51053	2024.50975	78	
52	2+4 RR(52, 9)	53 10	2023.00436	2023.00399	38	2+4 PR(52, 3)	53 2	2024.52285	2024.52242	43	
53	2+4 RR(48, 0)	49 1	2023.02205	2023.02158	47	2+4 RR(54, 0)	55 1	2024.59291	2024.59292	-1	
54	2+4 RR(58,27)	59 28	2023.03633	2023.03591	41	2+4 RR(62,18)	63 19	2024.59291	2024.59532	-240	
55	2+4 PR(45, 6)	46 5	2023.05291	2023.05427	-136	2+4 PR(46,15)	47 14	2024.60207	2024.60124	83	
56	2+4 PR(42,12)	43 11	2023.06699	2023.06680	18	2+4 RR(61,15)	62 16	2024.63318	2024.63384	-66	
57	2+4 PR(39,18)	40 17	2023.08913	2023.08991	-79	2+4 RR(57, 6)	58 7	2024.63861	2024.63769	92	
58	2+4 RR(51, 6)	52 7	2023.09373	2023.09318	55	2+4 PR(43,21)	44 20	2024.65577	2024.65498	79	
59	2+4 RR(56,18)	57 19	2023.10855	2023.10908	-53	2+4 PR(51, 6)	52 5	2024.66727	2024.66776	-49	
60	2+4 RR(57,21)	58 22	2023.11888	2023.11983	-95	2+4 RR(60,12)	61 13	2024.70079	2024.70040	39	
	2+4 RR(55,15)	56 16	2023.13360	2023.13383	-23	2+4 PR(48,12)	49 11	2024.71182	2024.71125	57	
	2+4 RR(58,24)	59 25	2023.17403	2023.17426	-23	2+4 PR(45,18)	46 17	2024.76470	2024.76495	-24	
	2+4 RR(54,12)	55 13	2023.18700	2023.18729	-29	2+4 RR(56, 3)	57 4	2024.76404	2024.76556	-86	
	2+4 PR(44, 9)	45 8	2023.19451	2023.19673	-222	2+4 RR(59, 9)	60 10	2024.79084	2024.79015	69	
	2+4 RR(50, 3)	51 4	2023.20735	2023.20576	159	2+4 PR(50, 9)	51 8	2024.82221	2024.82077	144	
	2+4 PR(41,15)	42 14	2023.21813	2023.21808	6	2+4 RR(63,18)	64 19	2024.83352W	2024.83709	-357	
	2+4 PR(38,21)	39 20	2023.24588	2023.24651	-63	2+4 RR(55, 0)	56 1	2024.84899	2024.84887	12	
	2+4 RR(53, 9)	54 10	2023.26450	2023.26417	33	2+4 PR(47,15)	48 14	2024.87219	2024.87291	-72	
	2+4 RR(59,27)	60 28	2023.28255	2023.28182	73	2+4 RR(62,15)	63 16	2024.87788	2024.87793	-5	
	2+4 RR(49, 0)	50 1	2023.28760	2023.28771	-11	2+4 RR(58, 6)	59 7	2024.88937	2024.88909	28	
	2+4 PR(46, 6)	47 5	2023.32731	2023.32733	-2	2+4 PR(52, 6)	53 5	2024.93089	2024.93088	1	
	2+4 PR(43,12)	44 11	2023.34536	2023.34501	34	2+4 PR(44,21)	45 20	2024.93089	2024.93172	-83	
	2+4 RR(52, 6)	53 7	2023.35510	2023.35489	21	2+4 RR(61,12)	62 13	2024.94723	2024.94670	53	
	2+4 RR(57,18)	58 19	2023.36090	2023.36103	-13	2+4 PR(49,12)	50 11	2024.98100	2024.97953	147	
	2+4 RR(58,21)	59 22	2023.37012	2023.36936	76	2+4 RR(57, 3)	58 4	2025.02091	2025.01969	122	
	2+4 RR(56,15)	57 16	2023.38781	2023.38806	-25	2+4 RR(60, 9)	61 10	2025.03902	2025.03863	39	
	2+4 RR(59,24)	60 25	2023.42068	2023.42121	-53	2+4 RR(64,18)	65 19	2025.07460	2025.07718	-258	
	2+4 RR(55,12)	56 13	2023.44377	2023.44368	9	2+4 RR(56, 0)	57 1	2025.10188	2025.10313	-126	
	2+4 PR(48, 3)	49 2	2023.45975	2023.46029	-54	2+4 RR(63,15)	64 16	2025.12125	2025.12033	91	
	2+4 RR(51, 3)	52 4	2023.46890	2023.46989	-99	2+4 RR(59, 6)	60 7	2025.13762	2025.13876	-115	
	2+4 PR(45, 9)	46 8	2023.46890	2023.47155	-265	2+4 RR(62,12)	63 13	2025.19156	2025.19132	24	
	2+4 PR(42,15)	43 14	2023.49848	2023.49802	46	2+4 PR(53, 6)	54 5	2025.19156	2025.19234	-78	

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PR(45, 21)	46 20	2025.20678	2025.20681	-3	2+4 PR(51, 15)	52 14	2025.94370	2025.94305	65
2+4 PR(50, 12)	51 11	2025.24735	2025.24616	119	2+4 PR(56, 6)	57 5	2025.96625	2025.96678	-53
2+4 RR(58, 3)	59 4	2025.27251	2025.27216	35	2+4 RR(61, 3)	62 4	2026.01976	2026.01969	7
2+4 RR(61, 9)	62 10	2025.28578	2025.28544	34	2+4 PR(48, 21)	49 20	2026.01976	2026.02217	-242
2+4 PR(47, 18)	48 17	2025.31023	2025.31007	16	2+4 PR(53, 12)	54 11	2026.03739	2026.03611	128
2+4 PR(52, 9)	53 8	2025.35074	2025.34886	188	2+4 RR(60, 0)	61 1	2026.10296	2026.10323	-27
2+4 RR(57, 0)	58 1	2025.35589	2025.35570	19	2+4 PR(50, 18)	51 17	2026.11541	2026.11536	5
2+4 RR(60, 6)	61 7	2025.38693	2025.38671	22	2+4 PR(55, 9)	56 8	2026.12953	2026.12858	95
2+4 PR(49, 15)	50 14	2025.41148	2025.41129	20	2+4 RR(66, 12)	67 13	2026.15309	2026.15300	9
2+4 RR(63, 12)	64 13	2025.43440	2025.43426	14	2+4 PR(57, 6)	58 5	2026.22102	2026.22162	-59
2+4 PR(54, 6)	55 5	2025.45178	2025.45214	-36	2+4 PR(49, 21)	50 20	2026.29021	2026.29066	-45
2+4 PR(46, 21)	47 20	2025.48025	2025.48025	0	2+4 RR(68, 15)	69 16	2026.30750	2026.30711	39
2+4 PR(51, 12)	52 11	2025.51254	2025.51113	141	2+4 RR(61, 0)	62 1	2026.34760	2026.34902	-142
2+4 RR(59, 3)	60 4	2025.52365	2025.52297	69	2+4 RR(67, 12)	68 13	2026.38978	2026.38923	54
2+4 RR(62, 9)	63 10	2025.53159	2025.53059	100	2+4 PR(53, 15)	54 14	2026.46853	2026.46820	34
2+4 PR(48, 18)	49 17	2025.57924	2025.58015	-91	2+4 PR(58, 6)	59 5	2026.47465	2026.47480	-15
2+4 RR(58, 0)	59 1	2025.60526	2025.60657	-131	2+4 RR(69, 15)	70 16	2026.53944	2026.53942	2
2+4 RR(61, 6)	62 7	2025.63298	2025.63292	6	2+4 PR(50, 21)	51 20	2026.55612	2026.55749	-137
2+4 RR(64, 12)	65 13	2025.67721	2025.67552	170	2+4 RR(68, 12)	69 13	2026.62502	2026.62379	123
2+4 PR(50, 15)	51 14	2025.67721	2025.67800	-78	2+4 PR(52, 18)	53 17	2026.64416	2026.64395	20
2+4 PR(55, 6)	56 5	2025.70995	2025.71029	-34	2+4 RR(63, 0)	64 1	2026.83595	2026.83553	42
2+4 PR(47, 21)	48 20	2025.75188	2025.75204	-16	2+4 RR(69, 12)	70 13	2026.85727	2026.85667	60
2+4 RR(60, 3)	61 4	2025.77281	2025.77210	71	2+4 RR(64, 0)	65 1	2027.07479	2027.07625	-146
2+4 RR(63, 9)	64 10	2025.77281	2025.77408	-127	2+4 PR(52, 21)	53 20	2027.08611	2027.08620	-8
2+4 PR(52, 12)	53 11	2025.77281	2025.77445	-163	2+4 PR(56, 15)	57 14	2027.24420	2027.24352	68
2+4 RR(66, 15)	67 16	2025.83796	2025.83745	51	2+4 PR(53, 21)	54 20	2027.34832	2027.34808	24
2+4 PR(49, 18)	50 17	2025.84989	2025.84858	131	2+4 PR(54, 21)	55 20	2027.60708	2027.60830	-122
2+4 RR(59, 0)	60 1	2025.85656	2025.85575	81	2+4 RR(67, 0)	68 1	2027.78785	2027.78828	-44
2+4 RR(62, 6)	63 7	2025.87829	2025.87741	88	2+4 PR(55, 21)	56 20	2027.86632	2027.86688	-56
2+4 RR(65, 12)	66 13	2025.91566	2025.91510	56	2+4 RR(69, 0)	70 1	2028.25463	2028.25453	9

Table III
Observed and Calculated Transition Wavenumbers in the $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$ Bands of $\text{F}^{35}\text{Cl}^{18}\text{O}_3$

(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PP(71, 6)	70 5	1958.45959	1958.45748	211	2+4 PP(61, 3)	60 2	1962.39138	1962.39075	63
2+4 PP(71, 9)	70 8	1958.88201	1958.88182	19	2+4 PP(66,18)	65 17	1962.41978	1962.42123	-145
2+4 RP(68, 0)	67 1	1958.93187	1958.93307	-120	2+4 PP(67,21)	66 20	1962.46230	1962.46170	60
2+4 RP(65, 9)	64 10	1959.28964	1959.29211	-247	2+4 RP(59, 3)	58 4	1962.49345	1962.49484	-140
2+4 PP(71,12)	70 11	1959.32182	1959.32143	39	2+4 PP(68,24)	67 23	1962.51098	1962.51014	84
2+4 PP(70, 9)	69 8	1959.32182	1959.32210	-27	2+4 PP(69,27)	68 26	1962.56551	1962.56557	-6
2+4 RP(64, 9)	63 10	1959.72414	1959.72560	-146	2+4 RP(58, 6)	57 7	1962.58929	1962.58866	62
2+4 PP(69, 9)	68 8	1959.76187	1959.76083	104	2+4 PP(70,30)	69 29	1962.62689	1962.62714	-25
2+4 PP(70,12)	69 11	1959.76187	1959.76145	42	2+4 PP(71,33)	70 32	1962.69417	1962.69412	5
2+4 PP(71,15)	70 14	1959.77449	1959.77421	28	2+4 RP(57, 9)	56 10	1962.71722	1962.71635	88
2+4 PP(68, 6)	67 5	1959.77449	1959.77449	0	2+4 PP(62, 9)	61 8	1962.79068	1962.78868	200
2+4 PP(68, 9)	67 8	1960.19912	1960.19802	110	2+4 PP(61, 6)	60 5	1962.79068	1962.79340	-271
2+4 PP(69,12)	68 11	1960.19912	1960.19994	-82	2+4 PP(63,12)	62 11	1962.79977	1962.79842	135
2+4 PP(67, 6)	66 5	1960.21100	1960.21041	58	2+4 PP(60, 3)	59 2	1962.81852	1962.81601	251
2+4 PP(71,18)	70 17	1960.23964	1960.23855	109	2+4 RP(59, 0)	58 1	1962.81852	1962.81961	-109
2+4 RP(63, 6)	62 7	1960.45373	1960.45444	-71	2+4 PP(64,15)	63 14	1962.81852	1962.82047	-195
2+4 PP(67, 9)	66 8	1960.63360	1960.63367	-8	2+4 PP(65,18)	64 17	1962.85329	1962.85314	15
2+4 PP(66, 6)	65 5	1960.64445	1960.64479	-34	2+4 RP(56,12)	55 13	1962.88935	1962.88804	132
2+4 PP(69,15)	68 14	1960.65260	1960.65228	32	2+4 PP(66,21)	65 20	1962.89592	1962.89498	93
2+4 RP(64, 0)	63 1	1960.67658	1960.67626	32	2+4 RP(55,18)	54 19	1962.93154	1962.93220	-66
2+4 PP(70,18)	69 17	1960.67658	1960.67817	-158	2+4 PP(67,24)	66 23	1962.94426	1962.94483	-56
2+4 PP(71,21)	70 20	1960.71154	1960.71313	-159	2+4 PP(68,27)	67 26	1963.00256	1963.00167	89
2+4 RP(63, 3)	62 4	1960.78474	1960.78630	-156	2+4 RP(57, 6)	56 7	1963.01159	1963.01076	83
2+4 RP(62, 6)	61 7	1960.88496	1960.88444	52	2+4 PP(69,30)	68 29	1963.06519	1963.06467	53
2+4 RP(61, 9)	60 10	1961.01751	1961.01676	75	2+4 RP(55,15)	54 16	1963.06519	1963.06628	-109
2+4 PP(66, 9)	65 8	1961.06781	1961.06778	4	2+4 PP(70,33)	69 32	1963.13379	1963.13309	70
2+4 PP(68,15)	67 14	1961.08962	1961.08901	61	2+4 RP(56, 9)	55 10	1963.13379W	1963.13729	-350
2+4 RP(63, 0)	62 1	1961.10661	1961.10811	-150	2+4 PP(71,36)	70 35	1963.20411	1963.20633	-223
2+4 PP(69,18)	68 17	1961.11607	1961.11625	-18	2+4 PP(61, 9)	60 8	1963.21511	1963.21502	10
2+4 PP(71,24)	70 23	1961.19684	1961.19684	0	2+4 PP(62,12)	61 11	1963.22673	1963.22607	66
2+4 RP(62, 3)	61 4	1961.21301	1961.21579	-279	2+4 PP(59, 3)	58 2	1963.24013	1963.23971	42
2+4 RP(61, 6)	60 7	1961.31454	1961.31287	168	2+4 PP(63,15)	62 14	1963.25023	1963.24947	76
2+4 RP(60, 9)	59 10	1961.44387	1961.44402	-15	2+4 PP(64,18)	63 17	1963.28402	1963.28349	52
2+4 PP(66,12)	65 11	1961.50787	1961.50614	172	2+4 PP(65,21)	64 20	1963.32750	1963.32672	78
2+4 PP(64, 6)	63 5	1961.50787	1961.50890	-103	2+4 RP(57, 3)	56 4	1963.33853	1963.33964	-111
2+4 PP(67,15)	66 14	1961.52539	1961.52420	119	2+4 RP(54,18)	53 19	1963.35410	1963.35217	193
2+4 RP(62, 0)	61 1	1961.53807	1961.53837	-31	2+4 PP(66,24)	65 23	1963.37775	1963.37797	-22
2+4 PP(68,18)	67 17	1961.55316	1961.55278	37	2+4 RP(56, 6)	55 7	1963.42896	1963.43126	-230
2+4 PP(69,21)	68 20	1961.59091	1961.59049	42	2+4 PP(67,27)	66 26	1963.43704	1963.43623	81
2+4 RP(59,12)	58 13	1961.61783	1961.61668	115	2+4 PP(68,30)	67 29	1963.49990	1963.50066	-76
2+4 RP(61, 3)	60 4	1961.64378	1961.64372	6	2+4 PP(69,33)	68 32	1963.56895	1963.57053	-157
2+4 PP(71,27)	70 26	1961.68764	1961.68875	-112	2+4 PP(60, 9)	59 8	1963.64147	1963.63979	169
2+4 RP(60, 6)	59 7	1961.73804	1961.73971	-167	2+4 PP(59, 6)	58 5	1963.64147	1963.64192	-44
2+4 RP(59, 9)	58 10	1961.87088	1961.86971	118	2+4 PP(70,36)	69 35	1963.64147W	1963.64522	-375
2+4 PP(64, 9)	63 8	1961.92917	1961.93134	-217	2+4 PP(61,12)	60 11	1963.65361	1963.65216	145
2+4 PP(65,12)	64 11	1961.93920	1961.93845	75	2+4 PP(58, 3)	57 2	1963.66405	1963.66185	220
2+4 PP(63, 6)	62 5	1961.93920	1961.93862	58	2+4 RP(57, 0)	56 1	1963.66405	1963.66578	-174
2+4 PP(62, 3)	61 2	1961.96498	1961.96393	104	2+4 PP(62,15)	61 14	1963.67740	1963.67690	49
2+4 RP(61, 0)	60 1	1961.96498	1961.96705	-207	2+4 PP(63,18)	62 17	1963.71293	1963.71230	63
2+4 PP(67,18)	66 17	1961.98812	1961.98778	33	2+4 PP(71,39)	70 38	1963.72447	1963.72421	27
2+4 PP(68,21)	67 20	1962.02785	1962.02687	98	2+4 RP(54,12)	53 13	1963.72447	1963.72707	-260
2+4 RP(58,12)	57 13	1962.04280	1962.04219	60	2+4 PP(64,21)	63 20	1963.75694	1963.75692	3
2+4 RP(60, 3)	59 4	1962.06922	1962.07007	-85	2+4 RP(53,18)	52 19	1963.77177	1963.77054	123
2+4 PP(69,24)	68 23	1962.07408	1962.07391	17	2+4 PP(65,24)	64 23	1963.80946	1963.80957	-11
2+4 RP(57,18)	56 19	1962.08805	1962.08754	51	2+4 RP(55, 6)	54 7	1963.84932	1963.85016	-84
2+4 PP(70,27)	69 26	1962.12762	1962.12793	-31	2+4 PP(66,27)	65 26	1963.86885	1963.86925	-39
2+4 PP(71,30)	70 29	1962.18746	1962.18807	-61	2+4 PP(67,30)	66 29	1963.93479	1963.93511	-32
2+4 RP(58, 9)	57 10	1962.29569	1962.29382	188	2+4 RP(54, 9)	53 10	1963.97107W	1963.97440	-333
2+4 PP(63, 9)	62 8	1962.36144	1962.36079	65	2+4 PP(68,33)	67 32	1964.00599	1964.00642	-43
2+4 PP(62, 6)	61 5	1962.36783	1962.36679	104	2+4 PP(59, 9)	58 8	1964.06188	1964.06300	-112
2+4 PP(64,12)	63 11	1962.36783	1962.36921	-138	2+4 PP(58, 6)	57 5	1964.06188	1964.06383	-195
2+4 PP(65,15)	64 14	1962.39138	1962.38993	145	2+4 PP(60,12)	59 11	1964.07635	1964.07669	-34

(I) The band type (2+4 and 225 correspond to $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$, respectively), the branch, (J lower and K lower) are reported.

(II) J upper and K upper

(III) Observed wavenumbers (in cm^{-1}).

(IV) Calculated wavenumbers (in cm^{-1}).

(V) Observed – Calculated values (in 10^5 cm^{-1}).

Observed wavenumbers identified by a W in column (III) have not been included in the fit.

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	PP(57, 3)	56	2	1964.08315	1964.08242	73				2+4	PP(56,12)	55	11	1965.75949	1965.75918	31			
2+4	PP(69,36)	68	35	1964.08315	1964.08257	58				2+4	PP(57,15)	56	14	1965.79047	1965.79070	-24			
2+4	PP(61,15)	60	14	1964.10249	1964.10279	-30				2+4	RP(49,12)	48	13	1965.79047W	1965.79533	-486			
2+4	PP(62,18)	61	17	1964.14021	1964.13955	66				2+4	PP(65,36)	64	35	1965.81604	1965.81658	-54			
2+4	PP(70,39)	69	38	1964.16134	1964.16302	-169				2+4	PP(58,18)	57	17	1965.83408	1965.83299	109			
2+4	RP(55, 3)	54	4	1964.17847	1964.17808	39				2+4	RP(51, 3)	50	4	1965.83408	1965.83580	-173			
2+4	PP(63,21)	62	20	1964.18665	1964.18556	109				2+4	PP(59,21)	58	20	1965.88531	1965.88459	72			
2+4	RP(52,18)	51	19	1964.18665	1964.18731	-66				2+4	PP(66,39)	65	38	1965.90197	1965.90291	-94			
2+4	PP(64,24)	63	23	1964.24068	1964.23962	106				2+4	RP(50, 6)	49	7	1965.92092	1965.92064	28			
2+4	PP(71,42)	70	41	1964.24695	1964.24731	-36				2+4	PP(60,24)	59	23	1965.94402	1965.94430	-28			
2+4	RP(54, 6)	53	7	1964.26962	1964.26747	215				2+4	RP(48,15)	47	16	1965.97760	1965.97640	120			
2+4	PP(65,27)	64	26	1964.29670W	1964.30072	-402				2+4	PP(67,42)	66	41	1965.99380	1965.99313	67			
2+4	PP(66,30)	65	29	1964.36839	1964.36801	37				2+4	PP(61,27)	60	26	1966.01167	1966.01112	55			
2+4	PP(67,33)	66	32	1964.44108	1964.44078	30				2+4	RP(49, 9)	48	10	1966.03894	1966.03914	-20			
2+4	PP(57, 6)	56	5	1964.48404	1964.48417	-13				2+4	PP(62,30)	61	29	1966.08435	1966.08418	17			
2+4	PP(58, 9)	57	8	1964.48404	1964.48464	-60				2+4	PP(68,45)	67	44	1966.08435	1966.08682	-247			
2+4	PP(59,12)	58	11	1964.50137	1964.49966	170				2+4	PP(53, 6)	52	5	1966.14990	1966.14977	13			
2+4	PP(56, 3)	55	2	1964.50137	1964.50142	-6				2+4	PP(54, 9)	53	8	1966.15561	1966.15550	10			
2+4	RP(55, 0)	54	1	1964.50592	1964.50554	38				2+4	PP(52, 3)	51	2	1966.16266	1966.16167	100			
2+4	PP(68,36)	67	35	1964.51883	1964.51839	45				2+4	PP(63,33)	62	32	1966.16266	1966.16276	-9			
2+4	PP(60,15)	59	14	1964.52802	1964.52711	91				2+4	RP(48,12)	47	13	1966.17575	1966.17547	27			
2+4	PP(61,18)	60	17	1964.56476	1964.56525	-48				2+4	PP(55,12)	54	11	1966.17575	1966.17588	-13			
2+4	RP(54, 3)	53	4	1964.59506	1964.59491	15				2+4	PP(69,48)	68	47	1966.18415	1966.18364	50			
2+4	PP(69,39)	68	38	1964.60218	1964.60030	188				2+4	PP(56,15)	55	14	1966.20825	1966.20877	-52			
2+4	RP(51,18)	50	19	1964.60218	1964.60247	-28				2+4	PP(64,36)	63	35	1966.24614	1966.24622	-8			
2+4	PP(62,21)	61	20	1964.61388	1964.61265	123				2+4	RP(50, 3)	49	4	1966.24614	1966.24623	-8			
2+4	PP(63,24)	62	23	1964.66633	1964.66812	-178				2+4	RP(47,18)	46	19	1966.24614	1966.24675	-61			
2+4	RP(53, 6)	52	7	1964.68299	1964.68317	-18				2+4	PP(57,18)	56	17	1966.25336	1966.25244	92			
2+4	PP(70,42)	69	41	1964.68299W	1964.68607	-308				2+4	PP(70,51)	69	50	1966.27951W	1966.28330	-379			
2+4	PP(64,27)	63	26	1964.73074	1964.73064	9				2+4	PP(58,21)	57	20	1966.30587	1966.30545	42			
2+4	PP(71,45)	70	44	1964.77572	1964.77529	44				2+4	RP(49, 6)	48	7	1966.33047	1966.32990	57			
2+4	PP(65,30)	64	29	1964.79932	1964.79938	-6				2+4	PP(65,39)	64	38	1966.33464	1966.33403	61			
2+4	RP(52, 9)	51	10	1964.80521	1964.80512	9				2+4	PP(59,24)	58	23	1966.36606	1966.36659	-53			
2+4	PP(66,33)	65	32	1964.87406	1964.87359	47				2+4	PP(66,42)	65	41	1966.42384	1966.42573	-189			
2+4	PP(56, 6)	55	5	1964.90338	1964.90293	45				2+4	PP(60,27)	59	26	1966.43473	1966.43484	-11			
2+4	PP(57, 9)	56	8	1964.90338	1964.90472	-133				2+4	PP(61,30)	60	29	1966.50872	1966.50935	-63			
2+4	PP(55, 3)	54	2	1964.92128	1964.91885	243				2+4	PP(67,45)	66	44	1966.52154	1966.52092	62			
2+4	PP(58,12)	57	11	1964.92128	1964.92107	21				2+4	PP(52, 6)	51	5	1966.56246	1966.56222	24			
2+4	RP(54, 0)	53	1	1964.92128	1964.92300	-172				2+4	PP(53, 9)	52	8	1966.57021	1966.56928	93			
2+4	PP(59,15)	58	14	1964.95114	1964.94987	127				2+4	PP(51, 3)	50	2	1966.57021	1966.57277	-256			
2+4	PP(67,36)	66	35	1964.95114	1964.95266	-151				2+4	RP(50, 0)	49	1	1966.57753	1966.57670	83			
2+4	RP(51,12)	50	13	1964.97386	1964.97302	84				2+4	PP(62,33)	61	32	1966.59059	1966.58938	121			
2+4	PP(60,18)	59	17	1964.98836	1964.98939	-103				2+4	PP(54,12)	53	11	1966.59059	1966.59101	-42			
2+4	RP(53, 3)	52	4	1965.01047	1965.01014	33				2+4	RP(47,12)	46	13	1966.61171	1966.61102	69			
2+4	RP(50,18)	49	19	1965.01615	1965.01599	16				2+4	PP(55,15)	54	14	1966.62571	1966.62527	44			
2+4	PP(68,39)	67	38	1965.03572	1965.03605	-33				2+4	RP(46,18)	45	19	1966.65414	1966.65370	44			
2+4	PP(61,21)	60	20	1965.03572	1965.03818	-246				2+4	RP(49, 3)	48	4	1966.65414	1966.65504	-90			
2+4	PP(62,24)	61	23	1965.09603	1965.09507	97				2+4	PP(56,18)	55	17	1966.67081	1966.67033	48			
2+4	RP(52, 6)	51	7	1965.09603	1965.09727	-124				2+4	PP(63,36)	62	35	1966.67081W	1966.67432	-350			
2+4	PP(69,42)	68	41	1965.12277	1965.12329	-52				2+4	PP(57,21)	56	20	1966.72265	1966.72475	-210			
2+4	RP(50,15)	49	16	1965.15184	1965.15363	-179				2+4	RP(48, 6)	47	7	1966.73782	1966.73755	27			
2+4	RP(51, 9)	50	10	1965.21700	1965.21807	-107				2+4	PP(64,39)	63	38	1966.76393W	1966.77261	-868			
2+4	PP(64,30)	63	29	1965.22941	1965.22919	22				2+4	PP(58,24)	57	23	1966.78825	1966.78731	94			
2+4	PP(65,33)	64	32	1965.30498	1965.30486	12				2+4	PP(65,42)	64	41	1966.85563	1966.85680	-117			
2+4	PP(55, 6)	54	5	1965.32223	1965.32013	210				2+4	PP(59,27)	58	26	1966.85563	1966.85700	-138			
2+4	PP(56, 9)	55	8	1965.32223	1965.32322	-99				2+4	PP(60,30)	59	29	1966.93380	1966.93296	84			
2+4	PP(54, 3)	53	2	1965.33443	1965.33470	-27				2+4	PP(66,45)	65	44	1966.95308	1966.95348	-40			
2+4	RP(53, 0)	52	1	1965.34039	1965.33885	154				2+4	PP(51, 6)	50	5	1966.97251	1966.97309	-57			
2+4	PP(57,12)	56	11	1965.34039	1965.34091	-51				2+4	PP(52, 9)	51							

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
1										
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5	2+4 PP(59,30)	58 29	1967.35454	1967.35502	-48	2+4 RP(42,12)	41 13	1968.62273	1968.62149	124
6	2+4 PP(50, 6)	49 5	1967.38220	1967.38236	-16	2+4 PP(49,12)	48 11	1968.64241	1968.64296	-55
7	2+4 PP(65,45)	64 44	1967.38220	1967.38451	-231	2+4 PP(62,45)	61 44	1968.66956	1968.66830	126
8	2+4 PP(49, 3)	48 2	1967.39198	1967.39022	175	2+4 RP(44, 3)	43 4	1968.67484	1968.67489	-5
9	2+4 PP(51, 9)	50 8	1967.39198	1967.39209	-11	2+4 PP(50,15)	49 14	1968.68455	1968.68415	40
10	2+4 RP(48, 0)	47 1	1967.39198	1967.39383	-185	2+4 PP(57,33)	56 32	1968.69937	1968.69922	15
11	2+4 PP(52,12)	51 11	1967.41575	1967.41653	-78	2+4 PP(51,18)	50 17	1968.73567	1968.73623	-56
12	2+4 PP(60,33)	59 32	1967.43882	1967.43798	84	2+4 RP(43, 6)	42 7	1968.75073	1968.75142	-69
13	2+4 PP(53,15)	52 14	1967.45438	1967.45355	83	2+4 PP(63,48)	62 47	1968.77435	1968.77419	16
14	2+4 RP(44,18)	43 19	1967.46054	1967.46265	-212	2+4 PP(58,36)	57 35	1968.79000	1968.79154	-154
15	2+4 RP(47, 3)	46 4	1967.46743	1967.46783	-40	2+4 PP(52,21)	51 20	1968.79554	1968.79775	-221
16	2+4 PP(66,48)	65 47	1967.48348	1967.48585	-238	2+4 RP(41,15)	40 16	1968.81648	1968.81764	-116
17	2+4 PP(54,18)	53 17	1967.50032	1967.50141	-109	2+4 RP(42, 9)	41 10	1968.86068	1968.86172	-104
18	2+4 PP(61,36)	60 35	1967.52540	1967.52586	-46	2+4 PP(53,24)	52 23	1968.86777	1968.86827	-50
19	2+4 RP(46, 6)	45 7	1967.54764	1967.54797	-34	2+4 PP(59,39)	58 38	1968.88633	1968.88826	-193
20	2+4 PP(55,21)	54 20	1967.55852	1967.55865	-13	2+4 PP(54,27)	53 26	1968.94426	1968.94441	-15
21	2+4 PP(67,51)	66 50	1967.59261	1967.59006	255	2+4 PP(60,42)	59 41	1968.98773	1968.98893	-120
22	2+4 *P(44,15)	43 19	1967.60254	1967.60109	145	2+4 PP(46, 6)	45 5	1969.00499	1969.00355	144
23	2+4 PP(62,39)	61 38	1967.61935	1967.61812	123	2+4 PP(45, 3)	44 2	1969.00499	1969.00599	-100
24	2+4 RP(44,15)	43 16	1967.61935	1967.62199	-263	2+4 PP(47, 9)	46 8	1969.01892	1969.01868	24
25	2+4 PP(56,24)	55 23	1967.62466	1967.62408	59	2+4 RP(41,12)	40 13	1969.01892	1969.01868	24
26	2+4 RP(45, 9)	44 10	1967.66290	1967.66184	106	2+4 PP(55,30)	54 29	1969.02838	1969.02767	71
27	2+4 PP(57,27)	56 26	1967.69643	1967.69665	-22	2+4 PP(48,12)	47 11	1969.04888	1969.04860	27
28	2+4 PP(63,42)	62 41	1967.71422	1967.71429	-8	2+4 RP(40,18)	39 19	1969.05988	1969.06036	-48
29	2+4 PP(58,30)	57 29	1967.77424	1967.77552	-128	2+4 RP(43, 3)	42 4	1969.07281	1969.07399	-118
30	2+4 PP(49, 6)	48 5	1967.78964	1967.79005	-41	2+4 PP(49,15)	48 14	1969.09192	1969.09119	73
31	2+4 PP(48, 3)	47 2	1967.79956	1967.79656	299	2+4 PP(61,45)	60 44	1969.09192	1969.09314	-122
32	2+4 RP(47, 0)	46 1	1967.79956	1967.79995	-40	2+4 PP(56,33)	55 32	1969.11699	1969.11651	47
33	2+4 PP(50, 9)	49 8	1967.79956	1967.80112	-157	2+4 PP(50,18)	49 17	1969.14528	1969.14469	60
34	2+4 *P(44,12)	43 16	1967.79956	1967.80133	-177	2+4 RP(42, 6)	41 7	1969.15083	1969.14930	154
35	2+4 PP(64,45)	63 44	1967.81486	1967.81398	87	2+4 PP(62,48)	61 47	1969.20148	1969.20055	93
36	2+4 RP(44,12)	43 13	1967.82259	1967.82222	37	2+4 PP(51,21)	50 20	1969.20896	1969.20764	133
37	2+4 PP(51,12)	50 11	1967.82770	1967.82692	78	2+4 PP(57,36)	56 35	1969.20896	1969.21031	-135
38	2+4 PP(59,33)	58 32	1967.86010	1967.85995	15	2+4 RP(41, 9)	40 10	1969.25856	1969.25841	15
39	2+4 RP(43,18)	42 19	1967.86590	1967.86458	132	2+4 PP(52,24)	51 23	1969.27805	1969.27882	-77
40	2+4 PP(52,15)	51 14	1967.86590	1967.86533	57	2+4 PP(58,39)	57 38	1969.30866	1969.30853	13
41	2+4 RP(46, 3)	45 4	1967.87243	1967.87180	62	2+4 PP(63,51)	62 50	1969.30866	1969.31086	-220
42	2+4 PP(53,18)	52 17	1967.91292	1967.91459	-167	2+4 PP(53,27)	52 26	1969.35780	1969.35720	59
43	2+4 PP(65,48)	64 47	1967.91823	1967.91684	139	2+4 PP(45, 6)	44 5	1969.40623	1969.40486	137
44	2+4 PP(60,36)	59 35	1967.94901	1967.94931	-29	2+4 PP(44, 3)	43 2	1969.40623	1969.40594	29
45	2+4 RP(45, 6)	44 7	1967.94901	1967.95075	-174	2+4 RP(43, 0)	42 1	1969.40623	1969.40812	-189
46	2+4 PP(54,21)	53 20	1967.97388	1967.97326	63	2+4 PP(59,42)	58 41	1969.40623W	1969.41070	-447
47	2+4 *P(43,15)	42 19	1968.00084	1968.00292	-208	2+4 PP(46, 9)	45 8	1969.42201	1969.42135	66
48	2+4 RP(43,15)	42 16	1968.02341	1968.02217	125	2+4 PP(54,30)	53 29	1969.44147	1969.44193	-45
49	2+4 PP(66,51)	65 50	1968.02341	1968.02258	84	2+4 PP(47,12)	46 11	1969.45333	1969.45266	68
50	2+4 PP(55,24)	54 23	1968.04120	1968.04011	109	2+4 RP(39,18)	38 19	1969.45333	1969.45558	-225
51	2+4 PP(61,39)	60 38	1968.04120	1968.04305	-185	2+4 RP(42, 3)	41 4	1969.47054	1969.47147	-93
52	2+4 PP(56,27)	55 26	1968.11409	1968.11414	-5	2+4 PP(48,15)	47 14	1969.49587	1969.49665	-77
53	2+4 PP(62,42)	61 41	1968.14096	1968.14072	24	2+4 PP(60,45)	59 44	1969.51592	1969.51643	-51
54	2+4 PP(57,30)	56 29	1968.19465	1968.19447	18	2+4 PP(55,33)	54 32	1969.53181	1969.53225	-44
55	2+4 PP(48, 6)	47 5	1968.19465	1968.19615	-150	2+4 PP(49,18)	48 17	1969.55185	1969.55157	28
56	2+4 PP(47, 3)	46 2	1968.20282	1968.20130	151	2+4 PP(50,21)	49 20	1969.61565	1969.61595	-30
57	2+4 *P(43,12)	42 16	1968.20282	1968.20343	-61	2+4 PP(61,48)	60 47	1969.62618	1969.62536	82
58	2+4 RP(46, 0)	45 1	1968.20282	1968.20444	-163	2+4 PP(56,36)	55 35	1969.62618	1969.62754	-136
59	2+4 PP(49, 9)	48 8	1968.20928	1968.20856	72	2+4 RP(40, 9)	39 10	1969.65420	1969.65346	75
60	2+4 RP(43,12)	42 13	1968.22296	1968.22268	28	2+4 PP(51,24)	50 23	1969.68874	1969.68858	16
	2+4 PP(50,12)	49 11	1968.23628	1968.23573	55	2+4 PP(57,39)	56 38	1969.72697	1969.72725	-28
	2+4 PP(63,45)	62 44	1968.24334	1968.24192	143	2+4 PP(62,51)	61 50	1969.73888	1969.73720	168
	2+4 RP(45, 3)	44 4	1968.27308	1968.27416	-107	2+4 PP(52,27)	51 26	1969.76924	1969.76842	82
	2+4 PP(51,15)	50 14	1968.27308	1968.27553	-245	2+4 RP(39,12)	38 13	1969.79368	1969.79431	-63
	2+4 PP(58,33)	57 32	1968.28135	1968.28036	98	2+4 PP(43, 3)	42 2	1969.80470	1969.80427	43
	2+4 PP(52,18)	51 17	1968.32603	1968.32620	-17	2+4 PP(44, 6)	43 5	1969.80470	1969.80456	14
	2+4 PP(64,48)	63 47	1968.34718	1968.34629	89	2+4 RP(42, 0)	41 1	1969.80470	1969.80607	-137
	2+4 PP(59,36)	58 35	1968.37174	1968.37120	54	2+4 PP(45, 9)	44 8	1969.82205	1969.82242	-37
	2+4 PP(53,21)	52 20	1968.38683	1968.38629	54	2+4 PP(58,42)	57 41	1969.83076	1969.83093	-17
	2+4 *P(42,15)	41 19	1968.39933W	1968.40300	-367	2+4 PP(53,30)	52 29	1969.85406	1969.85462	-56
	2+4 RP(42,15)	41 16	1968.42183	1968.42071	112	2+4 PP(46,12)	45 11	1969.85406	1969.85512	-106
	2+4 PP(65,51)	64 50	1968.45471	1968.45355	116	2+4 RP(41, 3)	40 4	1969.86886	1969.86733	153
	2+4 PP(54,24)	53 23	1968.45471	1968.45458	13	2+4 PP(47,15)	46 14	1969.90132	1969.90052	80
	2+4 RP(43, 9)	42 10	1968.46514	1968.46339	175	2+4 PP(59,45)	58 44	1969.93796	1969.93816	-20
	2+4 PP(60,39)	59 38	1968.46514	1968.46643	-129	2+4 RP(40, 6)	39 7	1969.93796	1969.94016	-219
	2+4 PP(55,27)	54 26	1968.52940	1968.53006	-66	2+4 PP(54,33)	53 32	1969.94694	1969.94642	52
	2+4 PP(61,42)	60 41	1968.56588	1968.56560	28	2+4 PP(48,18)	47 17	1969.95695	1969.95686	9
	2+4 RP(47, 6)	46 5	1968.60183	1968.60065	119	2+4 *P(38,15)	37 19	1969.98672	1969.98583	90
	2+4 *P(42,12)	41 16	1968.60183	1968.60378	-195	2+4 RP(38,15)	37 16	1969.99991	1969.99868	122
	2+4 PP(46, 3)	45 2	1968.60183	1968.60445	-261	2+4 PP(49,21)	48 20	1970.02332	1970.02268	64
	2+4 PP(56,30)	55 29	1968.61226	1968.61185	41	2+4 PP(55,36)	54 35	1970.04398	1970.04320	78
	2+4 PP(48, 9)	47 8	1968.61226	1968.61442	-216	2+4 RP(39, 9)	38 10	1970.04919	1970.04685	234

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2+4	PP(60,48)	59	47	1970.04919	1970.04862	57	2+4	PP(48,27)	47	26	1971.39772	1971.39758	13	2+4	PP(41, 9)	40	8	1971.41131	1971.41073	57	2+4	PP(58,51)	57	50	1971.42467	1971.42707	-239	2+4	RP(37, 3)	36	4	1971.43444	1971.43440	4	2+4	PP(51,27)	50	26	1970.17832	1970.17807	25	2+4	PP(42,12)	41	11	1971.44766	1971.44904	-138	2+4	RP(38,12)	37	13	1970.20172	1970.20048	124	2+4	PP(49,30)	48	29	1971.48957	1971.48969	-12	2+4	PP(42, 3)	41	2	1970.20172	1970.20100	72	2+4	PP(54,42)	53	41	1971.49892	1971.49624	268	2+4	RP(41, 0)	40	1	1970.20172	1970.20238	-66	2+4	PP(43,15)	42	14	1971.49892	1971.50012	-120	2+4	PP(43, 6)	42	5	1970.20172	1970.20266	-94	2+4	PP(59,54)	58	53	1971.54875	1971.54776	99	2+4	PP(44, 9)	43	8	1970.22191	1970.22190	1	2+4	RP(34,15)	33	16	1971.54875	1971.55087	-212	2+4	RP(37,18)	36	19	1970.24044	1970.24095	-50	2+4	PP(44,18)	43	17	1971.56163	1971.56220	-58	2+4	PP(57,42)	56	41	1970.24962	1970.24959	3	2+4	PP(50,33)	49	32	1971.58784	1971.58744	41	2+4	PP(45,12)	44	11	1970.25675	1970.25599	75	2+4	RP(35, 9)	34	10	1971.60410	1971.60391	19	2+4	RP(40, 3)	39	4	1970.26232	1970.26155	77	2+4	PP(55,45)	54	44	1971.61021	1971.60955	65	2+4	PP(52,30)	51	29	1970.26595	1970.26574	20	2+4	PP(45,21)	44	20	1971.63466	1971.63382	84	2+4	PP(62,54)	61	53	1970.27899	1970.27804	95	2+4	PP(51,36)	50	35	1971.68888	1971.69020	-133	2+4	PP(46,15)	45	14	1970.30173	1970.30281	-108	2+4	PP(46,24)	45	23	1971.71462	1971.71374	88	2+4	RP(39, 6)	38	7	1970.33363	1970.33312	51	2+4	PP(56,48)	55	47	1971.72602	1971.72612	-10	2+4	PP(58,45)	57	44	1970.35911	1970.35835	76	2+4	RP(37, 0)	36	1	1971.77125	1971.77118	7	2+4	PP(53,33)	52	32	1970.35911	1970.35903	8	2+4	PP(38, 3)	37	2	1971.77125	1971.77181	-56	2+4	PP(47,18)	46	17	1970.35911	1970.36058	-147	2+4	PP(39, 6)	38	5	1971.77750	1971.77901	-151	2+4	PP(48,21)	47	20	1970.42774	1970.42784	-11	2+4	PP(52,39)	51	38	1971.80018	1971.79743	275	2+4	RP(38, 9)	37	10	1970.43751	1970.43860	-109	2+4	PP(47,27)	46	26	1971.80018	1971.80094	-75	2+4	PP(54,36)	53	35	1970.45711	1970.45730	-18	2+4	PP(40, 9)	39	8	1971.80018W	1971.80380	-362	2+4	PP(59,48)	58	47	1970.47077	1970.47032	45	2+4	PP(41,12)	40	11	1971.84429	1971.84353	77	2+4	PP(49,24)	48	23	1970.50368	1970.50338	30	2+4	PP(57,51)	56	50	1971.84429	1971.84565	-136	2+4	PP(55,39)	54	38	1970.56035	1970.56001	34	2+4	PP(48,30)	47	29	1971.89553	1971.89453	100	2+4	PP(60,51)	59	50	1970.58513	1970.58524	-10	2+4	PP(42,15)	41	14	1971.89553	1971.89604	-51	2+4	PP(50,27)	49	26	1970.58513	1970.58615	-102	2+4	PP(53,42)	52	41	1971.90851	1971.90867	-15	2+4	PP(41, 3)	40	2	1970.59717	1970.59613	104	2+4	RP(33,15)	32	16	1971.93541	1971.93490	51	2+4	RP(40, 0)	39	1	1970.59717	1970.59705	11	2+4	PP(43,18)	42	17	1971.96026	1971.95957	69	2+4	PP(42, 6)	41	5	1970.59717	1970.59916	-200	2+4	PP(58,54)	57	53	1971.96959	1971.96789	170	2+4	PP(43, 9)	42	8	1970.61883	1970.61978	-95	2+4	RP(34, 9)	33	10	1971.98888	1971.98903	-15	2+4	RP(39, 3)	38	4	1970.65471	1970.65414	58	2+4	PP(49,33)	48	32	1971.99417	1971.99377	40	2+4	PP(44,12)	43	11	1970.65471	1970.65527	-56	2+4	PP(54,45)	53	44	1972.02302	1972.02351	-49	2+4	PP(56,42)	55	41	1970.66640	1970.66670	-30	2+4	PP(44,21)	43	20	1972.03312	1972.03264	48	2+4	PP(51,30)	50	29	1970.67510	1970.67529	-19	2+4	PP(50,36)	49	35	1972.09480W	1972.09804	-323	2+4	PP(61,54)	60	53	1970.70405	1970.70283	122	2+4	PP(45,24)	44	23	1972.11499	1972.11404	95	2+4	PP(45,15)	44	14	1970.70405	1970.70350	55	2+4	RP(33,12)	32	13	1972.12772	1972.12759	13	2+4	RP(38, 6)	37	7	1970.72432	1970.72445	-14	2+4	PP(55,48)	54	47	1972.14261	1972.14161	100	2+4	PP(46,18)	45	17	1970.76346	1970.76271	76	2+4	RP(36, 0)	35	1	1972.15980	1972.15926	54	2+4	PP(52,33)	51	32	1970.76982	1970.77007	-24	2+4	PP(37, 3)	36	2	1972.15980	1972.16047	-67	2+4	PP(57,45)	56	44	1970.77803	1970.77697	106	2+4	PP(38, 6)	37	5	1972.16938	1972.16907	31	2+4	RP(36,15)	35	16	1970.77803	1970.77799	4	2+4	PP(39, 9)	38	8	1972.19638	1972.19527	111	2+4	RP(37, 9)	36	10	1970.82936	1970.82869	67	2+4	PP(46,27)	45	26	1972.20496	1972.20271	225	2+4	PP(47,21)	46	20	1970.82936	1970.83142	-206	2+4	PP(51,39)	50	38	1972.20496	1972.20678	-182	2+4	PP(53,36)	52	35	1970.86988	1970.86983	5	2+4	PP(40,12)	39	11	1972.23697	1972.23641	56	2+4	PP(58,48)	57	47	1970.89064	1970.89048	16	2+4	PP(56,51)	55	50	1972.26276	1972.26268	9	2+4	PP(48,24)	47	23	1970.90629	1970.90841	-212	2+4	RP(34, 6)	33	7	1972.27219	1972.27328	-108	2+4	PP(54,39)	53	38	1970.97153	1970.97405	-252	2+4	PP(41,15)	40	14	1972.28883	1972.29036	-153	2+4	PP(40, 3)	39	2	1970.99130	1970.98963	166	2+4	PP(47,30)	46	29	1972.29777	1972.29779	-2	2+4	RP(39, 0)	38	1	1970.99130	1970.99008	122	2+4	RP(32,15)	31	16	1972.31889	1972.31731	159	2+4	PP(49,27)	48	26	1970.99130	1970.99266	-136	2+4	PP(52,42)	51	41	1972.31889	1972.31953	-64	2+4	PP(41, 6)	40	5	1970.99130	1970.99405	-276	2+4	PP(42,18)	41	17	1972.35485	1972.35534	-49	2+4	PP(59,51)	58	50	1971.00772	1971.00693	80	2+4	RP(33, 9)	32	10	1972.37255	1972.37249	5	2+4	PP(42, 9)	41	8	1971.01743	1971.01606	137	2+4	PP(57,54)	56	53	1972.38733	1972.38647	86	2+4	RP(35,18)	34	19	1971.01743	1971.01952	-209	2+4	PP(48,33)	47	32	1972.39920	1972.39853	67	2+4	RP(38, 3)	37	4	1971.04444	1971.04509	-64	2+4	PP(43,21)	42	20	1972.43130	1972.42988	142	2+4	PP(43,12)	42	11	1971.05327	1971.05296	31	2+4	PP(53,45)	52	44	1972.43620	1972.43590	30	2+4	PP(55,42)	54	41	1971.08243	1971.08225	18	2+4	PP(49,36)	48	35	1972.50344	1972.50430	-86	2+4	PP(50,30)	49	29	1971.08243	1971.08328	-85	2+4	RP(32,12)	31	13	1972.51305	1972.51025	280	2+4	PP(44,15)	43	14	1971.10298	1971.10261	37	2+4	PP(44,24)	43	23	1972.51305	1972.51275	31	2+4	RP(37, 6)	36	7	1971.11197	1971.11413	-216	2+4	RP(35, 0)	34	1	1972.54579	1972.54568	11	2+4	PP(60,54)	59	53	1971.12664	1971.12607	57	2+4	PP(36, 3)	35	2	1972.54579	1972.54751	-172	2+4	PP(45,18)	44	17	1971.16369	1971.16325	44	2+4	PP(54,48)	53	47	1972.55612	1972.55553	58	2+4	RP(35,15)	34	16	1971.16369	1971.16523	-154	2+4	RP(31,18)	30	19	1972.55612	1972.55617	-5	2+4	PP(51,33)	50	32	1971.17791	1971.17954	-163	2+4	PP(37, 6)	36	5	1972.55612	1972.55751	-139	2+4	PP(56,45)	55	44	1971.19336	1971.19404	-68	2+4	PP(38, 9)	37	8	1972.58521	1972.58512	9	2+4	RP(36, 9)	35	10	1971.21646	1971.21713	-67	2+4	RP(34, 3)	33	4	1972.59250	1972.59251	-1	2+4	PP(46,21)	45	20	1971.23291	1971.23341	-50	2+4	PP(45,27)	44	26	1972.60326	1972.60290	36	2+4	PP(52,36)	51	35	1971.28082	1971.28

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)		
2+4 PP(41,18)	40	17	1972.75055	1972.74952	102	2+4 PP(34, 9)	33	8	1974.12879	1974.12842	36
2+4 PP(47,33)	46	32	1972.80161	1972.80171	-10	2+4 PP(35,12)	34	11	1974.17583	1974.17677	-94
2+4 PP(56,54)	55	53	1972.80161	1972.80350	-189	225 RQ(35,18)	35	19	1974.18789	1974.18688	100
2+4 PP(42,21)	41	20	1972.82580	1972.82553	27	2+4 PP(41,27)	40	26	1974.18789	1974.18783	6
2+4 PP(52,45)	51	44	1972.84775	1972.84672	102	2+4 PP(50,48)	49	47	1974.19548	1974.19560	-12
2+4 RP(31,12)	30	13	1972.89099	1972.89115	-16	2+4 RP(27,15)	26	16	1974.20399	1974.20470	-71
2+4 PP(48,36)	47	35	1972.90973	1972.90899	74	2+4 PP(46,39)	45	38	1974.22919	1974.22994	-76
2+4 PP(43,24)	42	23	1972.90973	1972.90987	-14	2+4 PP(36,15)	35	14	1974.23780	1974.23798	-17
2+4 RP(34, 0)	33	1	1972.93028	1972.93045	-17	2+4 RP(28, 9)	27	10	1974.26502	1974.26477	26
2+4 PP(35, 3)	34	2	1972.93028	1972.93293	-265	2+4 PP(42,30)	41	29	1974.29020	1974.29040	-20
2+4 PP(36, 6)	35	5	1972.94335	1972.94434	-99	225 RQ(35,21)	35	22	1974.30036	1974.29916	120
2+4 PP(53,48)	52	47	1972.96915	1972.96790	126	225 RQ(36,24)	36	25	1974.30036	1974.29954	82
2+4 PP(37, 9)	36	8	1972.96915W	1972.97337	-421	2+4 PP(37,18)	36	17	1974.31081	1974.31028	53
2+4 PP(44,27)	43	26	1973.00144	1973.00151	-7	2+4 PP(51,51)	50	50	1974.32384	1974.32442	-58
2+4 PP(38,12)	37	11	1973.01838	1973.01738	100	2+4 PP(47,42)	46	41	1974.34953	1974.35032	-80
2+4 PP(49,39)	48	38	1973.01838	1973.02076	-238	2+4 PP(38,21)	37	20	1974.39349	1974.39219	130
2+4 RP(32, 6)	31	7	1973.03742	1973.03778	-36	2+4 RP(27,12)	26	13	1974.39882	1974.39729	153
2+4 PP(39,15)	38	14	1973.07349	1973.07421	-72	2+4 PP(43,33)	42	32	1974.39882	1974.39867	15
2+4 PP(54,51)	53	50	1973.09259	1973.09206	53	225 RQ(31,18)	31	19	1974.43116	1974.43328	-212
2+4 PP(45,30)	44	29	1973.09946	1973.09958	-12	2+4 RP(30, 0)	29	1	1974.45389	1974.45294	95
2+4 RP(31, 9)	30	10	1973.13480	1973.13441	39	2+4 PP(31, 3)	30	2	1974.45855	1974.45834	22
2+4 PP(50,42)	49	41	1973.13480	1973.13656	-175	2+4 PP(48,45)	47	44	1974.47423	1974.47436	-13
2+4 PP(40,18)	39	17	1973.14226	1973.14211	15	2+4 PP(32, 6)	31	5	1974.47423	1974.47544	-122
2+4 PP(46,33)	45	32	1973.20273	1973.20332	-59	2+4 PP(39,24)	38	23	1974.48315	1974.48247	68
2+4 PP(55,54)	54	53	1973.21933	1973.21897	36	225 RQ(32,21)	32	22	1974.48315	1974.48512	-197
2+4 PP(41,21)	40	20	1973.21933	1973.21958	-25	225 RQ(33,24)	33	25	1974.48985	1974.48925	60
2+4 PP(51,45)	50	44	1973.25526	1973.25598	-73	2+4 RP(29, 3)	28	4	1974.48985	1974.48976	9
2+4 RP(30,12)	29	13	1973.27073	1973.27030	43	225 RQ(30,18)	30	19	1974.48985	1974.49029	-44
2+4 PP(42,24)	41	23	1973.30641	1973.30541	100	2+4 PP(33, 9)	32	8	1974.51085	1974.51021	63
2+4 PP(47,36)	46	35	1973.31374	1973.31211	164	2+4 PP(44,36)	43	35	1974.51085	1974.51200	-115
2+4 RP(33, 0)	32	1	1973.31374	1973.31356	18	225 RQ(29,18)	29	19	1974.54748	1974.54545	203
2+4 RP(29,18)	28	19	1973.31374	1973.31421	-47	2+4 RP(28, 6)	27	7	1974.54748	1974.54687	61
2+4 PP(35, 6)	34	5	1973.32901	1973.32955	-54	225 RQ(26,15)	26	16	1974.54748	1974.54905	-157
2+4 RP(32, 3)	31	4	1973.35574	1973.35636	-61	2+4 PP(34,12)	33	11	1974.56039	1974.56001	39
2+4 PP(36, 9)	35	8	1973.36080	1973.36000	80	2+4 PP(40,27)	39	26	1974.57989	1974.58009	-21
2+4 PP(52,48)	51	47	1973.37832	1973.37870	-38	225 RQ(28,18)	28	19	1974.60106	1974.59877	229
2+4 PP(43,27)	42	26	1973.39909	1973.39854	56	225 RQ(30,21)	30	22	1974.60106	1974.59997	109
2+4 PP(37,12)	36	11	1973.40651	1973.40545	106	2+4 PP(49,48)	48	47	1974.60106	1974.60170	-64
2+4 RP(31, 6)	30	7	1973.41806	1973.41754	51	2+4 PP(35,15)	34	14	1974.62290	1974.62269	22
2+4 PP(48,39)	47	38	1973.42488	1973.42539	-52	2+4 PP(45,39)	44	38	1974.62949	1974.62985	-37
2+4 PP(38,15)	37	14	1973.46317	1973.46374	-56	2+4 RP(27, 9)	26	10	1974.63931	1974.63820	111
2+4 PP(44,30)	43	29	1973.49863	1973.49810	53	225 RQ(27,18)	27	19	1974.65040	1974.65026	14
2+4 PP(53,51)	52	50	1973.50456	1973.50441	15	225 RQ(29,21)	29	22	1974.65585	1974.65466	119
2+4 RP(30, 9)	29	10	1973.51369	1973.51287	82	2+4 PP(41,30)	40	29	1974.68368	1974.68417	-49
2+4 PP(39,18)	38	17	1973.53261	1973.53310	-48	2+4 PP(36,18)	35	17	1974.69673	1974.69646	27
2+4 PP(49,42)	48	41	1973.54240	1973.54272	-32	225 RQ(28,21)	28	22	1974.70746	1974.70752	-7
2+4 PP(45,33)	44	32	1973.60225	1973.60335	-110	225 RQ(22,15)	22	16	1974.73018	1974.73067	-49
2+4 PP(40,21)	39	20	1973.61221	1973.61205	16	2+4 PP(46,42)	45	41	1974.75093	1974.75177	-84
2+4 PP(54,54)	53	53	1973.63321	1973.63287	34	2+4 PP(37,21)	36	20	1974.77993	1974.77986	7
2+4 RP(29,12)	28	13	1973.64797	1973.64770	28	225 RQ(24,18)	24	19	1974.79384	1974.79367	17
2+4 PP(50,45)	49	44	1973.66243	1973.66368	-125	2+4 PP(42,33)	41	32	1974.79384	1974.79395	-11
2+4 RP(32, 0)	31	1	1973.69824W	1973.69502	322	2+4 RP(29, 0)	28	1	1974.82878	1974.82941	-63
2+4 PP(33, 3)	32	2	1973.69824	1973.69889	-65	2+4 PP(30, 3)	29	2	1974.83585	1974.83561	24
2+4 PP(41,24)	40	23	1973.69824	1973.69935	-111	225 RQ(23,18)	23	19	1974.83585	1974.83780	-195
2+4 PP(34, 6)	33	5	1973.71303	1973.71313	-10	2+4 PP(31, 6)	30	5	1974.85433	1974.85416	16
2+4 PP(46,36)	45	35	1973.71303	1973.71365	-62	225 RQ(25,21)	25	22	1974.85433	1974.85518	-85
2+4 RP(31, 3)	30	4	1973.73612	1973.73581	31	2+4 RP(28, 3)	27	4	1974.86246	1974.86425	-179
2+4 PP(35, 9)	34	8	1973.74578	1973.74502	76	2+4 PP(38,24)	37	23	1974.87370	1974.87165	205
2+4 PP(51,48)	50	47	1973.79131W	1973.78793	338	2+4 PP(47,45)	46	44	1974.87370W	1974.87734	-364
2+4 PP(36,12)	35	11	1973.79131	1973.79191	-60	2+4 PP(32, 9)	31	8	1974.89017	1974.89038	-21
2+4 PP(42,27)	41	26	1973.79131	1973.79398	-266	2+4 PP(43,36)	42	35	1974.90876	1974.90880	-4
2+4 PP(47,39)	46	38	1973.82774	1973.82846	-72	2+4 RP(27, 6)	26	7	1974.91846	1974.91999	-152
2+4 PP(37,15)	36	14	1973.85253	1973.85166	87	225 RQ(21,18)	21	19	1974.91846	1974.92054	-208
2+4 PP(43,30)	42	29	1973.89394	1973.89504	-110	2+4 PP(33,12)	32	11	1974.94093	1974.94164	-70
2+4 PP(52,51)	51	50	1973.91595	1973.91520	76	2+4 PP(39,27)	38	26	1974.97086	1974.97077	9
2+4 PP(38,18)	37	17	1973.92269	1973.92249	21	2+4 PP(34,15)	33	14	1975.00582	1975.00579	4
2+4 PP(48,42)	47	41	1973.94691	1973.94731	-40	2+4 PP(48,48)	47	47	1975.00582	1975.00623	-41
2+4 PP(44,33)	43	32	1974.00164	1974.00180	-15	2+4 PP(44,39)	43	38	1975.02773	1975.02819	-46
2+4 PP(39,21)	38	20	1974.00164	1974.00292	-127	2+4 PP(40,30)	39	29	1975.07712	1975.07635	77
2+4 RP(28,12)	27	13	1974.02337	1974.02336	1	2+4 PP(35,18)	34	17	1975.08243	1975.08105	138
2+4 PP(49,45)	48	44	1974.07007	1974.06980	27	2+4 PP(45,42)	44	41	1975.15067	1975.15164	-97
2+4 RP(31, 0)	30	1	1974.07534	1974.07481	53	2+4 PP(36,21)	35	20	1975.16576	1975.16594	-18
2+4 PP(32, 3)	31	2	1974.08019	1974.07943	76	2+4 PP(41,33)	40	32	1975.18728	1975.18765	-37
2+4 PP(40,24)	39	23	1974.09272	1974.09171	101	2+4 RP(28, 0)	27	1	1975.20305	1975.20422	-117
225 RQ(39,24)	39	25	1974.09272	1974.09355	-83	2+4 PP(29, 3)	28	2	1975.21092	1975.21125	-34
2+4 PP(33, 6)	32	5	1974.09272	1974.09510	-238	2+4 PP(30, 6)	29	5	1975.23081	1975.23125	-44
2+4 RP(30, 3)	29	4	1974.11321	1974.11361	-40	2+4 RP(27, 3)	26	4	1975.23721	1975.23709	12
2+4 PP(45,36)	44	35	1974.11321	1974.11361	-40	2+4 PP(37,24)	36	23	1975.25898	1975.25922	-24

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2+4	PP	(31, 9)	30	8	1975.26892	1975.26893	-1	2+4	RP	(23, 0)	22	1	1977.05319	1977.05320	-1	2+4	PP	(24, 3)	23	2	1977.06376	1977.06490	-114	2+4	PP	(31,21)	30	20	1977.07252	1977.07228	24	2+4	PP	(25, 6)	24	5	1977.09197	1977.09224	-27	2+4	PP	(36,33)	35	32	1977.13206	1977.13233	-27	2+4	PP	(26, 9)	25	8	1977.13850	1977.13729	121	2+4	PP	(32,24)	31	23	1977.17348	1977.17311	37	2+4	PP	(27,12)	26	11	1977.19722	1977.19745	-23	2+4	RP	(20, 9)	19	10	1977.20521	1977.20518	3	2+4	PP	(37,36)	36	35	1977.25592	1977.25636	-44	2+4	PP	(28,15)	27	14	1977.27065	1977.27054	10	2+4	PP	(33,27)	32	26	1977.28043	1977.28132	-90	2+4	PP	(29,18)	28	17	1977.35496	1977.35480	16	2+4	PP	(34,30)	33	29	1977.39547	1977.39603	-57	2+4	RP	(22, 0)	21	1	1977.41780	1977.41798	-18	2+4	PP	(23, 3)	22	2	1977.43037	1977.43070	-33	2+4	RP	(21, 3)	20	4	1977.43897	1977.43927	-30	2+4	PP	(30,21)	29	20	1977.44828	1977.44873	-45	2+4	PP	(24, 6)	23	5	1977.45939	1977.45953	-14	2+4	RP	(20, 6)	19	7	1977.48415	1977.48502	-87	2+4	PP	(25, 9)	24	8	1977.50585	1977.50608	-23	2+4	PP	(35,33)	34	32	1977.51665	1977.51649	15	2+4	PP	(31,24)	30	23	1977.55090	1977.55108	-19	2+4	RP	(19, 9)	18	10	1977.56726	1977.56514	212	2+4	PP	(26,12)	25	11	1977.56726	1977.56774	-48	2+4	PP	(36,36)	35	35	1977.64201	1977.64206	-6	2+4	PP	(27,15)	26	14	1977.64201	1977.64234	-34	2+4	PP	(32,27)	31	26	1977.66066	1977.66082	-16	2+4	PP	(28,18)	27	17	1977.72867	1977.72812	56	2+4	PP	(33,30)	32	29	1977.77697	1977.77706	-9	2+4	RP	(21, 0)	20	1	1977.77697W	1977.78109	-412	2+4	PP	(22, 3)	21	2	1977.79534	1977.79486	48	2+4	RP	(20, 3)	19	4	1977.80132	1977.80047	85	2+4	PP	(29,21)	28	20	1977.82367	1977.82356	11	2+4	PP	(23, 6)	22	5	1977.82367	1977.82519	-152	2+4	RP	(19, 6)	18	7	1977.84471	1977.84476	-5	2+4	PP	(24, 9)	23	8	1977.87294	1977.87324	-30	2+4	PP	(34,33)	33	32	1977.89855	1977.89906	-51	2+4	PP	(30,24)	29	23	1977.92655	1977.92744	-89	2+4	PP	(25,12)	24	11	1977.93666	1977.93640	26	2+4	PP	(26,15)	25	14	1978.01273	1978.01252	20	2+4	PP	(31,27)	30	26	1978.03877	1978.03871	6	2+4	RP	(27,18)	26	17	1978.10015	1978.09982	34	2+4	RP	(20, 0)	19	1	1978.14224	1978.14251	-27	2+4	PP	(32,30)	31	29	1978.15689	1978.15649	40	2+4	PP	(21, 3)	20	2	1978.15689	1978.15737	-47	2+4	PP	(22, 6)	21	5	1978.19002	1978.18920	82	2+4	PP	(28,21)	27	20	1978.19699	1978.19679	20	2+4	PP	(23, 9)	22	8	1978.23786	1978.23876	-91	2+4	PP	(33,33)	32	32	1978.27920	1978.28002	-82	2+4	PP	(29,24)	28	23	1978.30263	1978.30220	43	2+4	PP	(24,12)	23	11	1978.30263	1978.30344	-81	2+4	PP	(25,15)	24	14	1978.38143	1978.38108	35	2+4	PP	(30,27)	29	26	1978.41539	1978.41500	39	2+4	PP	(26,18)	25	17	1978.46972	1978.46990	-18	2+4	RP	(19, 0)	18	1	1978.50214	1978.50226	-12	2+4	RP	(18, 3)	17	4	1978.51755	1978.51787	-32	2+4	PP	(20, 3)	19	2	1978.51755	1978.51823	-67	2+4	PP	(31,30)	30	29	1978.53431	1978.53432	0	2+4	PP	(21, 6)	20	5	1978.55154	1978.55157	-4	2+4	RP	(17, 6)	16	7	1978.55931	1978.55918	12	2+4	PP	(27,21)	26	20	1978.56826	1978.56840	-14	2+4	PP	(22, 9)	21	8	1978.60217	1978.60265	-48	2+4	PP	(23,12)	22	11	1978.67024	1978.66885	139	2+4	PP	(28,24)	27	23	1978.67560	1978.67535	25	2+4	PP	(24,15)	23	14	1978.74831	1978.74802	29	2+4	PP	(29,27)	28	26	1978.79004	1978.78969	36	2+4	PP	(25,18)	24	17	1978.83852	1978.83836	16	2+4	RP	(18, 0)	17	1	1978.86026	1978.86033	-6	2+4	RP	(17, 3)	16	4	1978.87635	1978.87407	228	2+4	PP	(19, 3)	18	2	1978.87635	1978.87744	-109	2+4	PP	(30,30)	29	29	1978.91091	1978.91054	37	2+4	PP	(20, 6)	19	5	1978.91091	1978.91230	-139	2+4	PP	(26,21)	25	20	1978.93843	1978.93840	3	2+4	PP	(21, 9)	20	8	1978.96454	1978.96490	-36	2+4	PP	(22,12)	21	11	1979.03190	1979.03263	-73	2+4	PP	(27,24)	26	23	1979.04734	1979.04688	46	225	RR	(12,12)	13	13	1979.10404	1979.10415	-12

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2+4	PP(23,15)	22	14	1979.11374	1979.11333	41	2+4	RQ(56,15)	56	16	1980.85841	1980.85939	-99	2+4	PP(28,27)	27	26	1979.16277	1979.16276	1	2+4	RQ(53,24)	53	25	1980.87465	1980.87395	70	2+4	PP(24,18)	23	17	1979.20539	1979.20521	18	225	RR(18,12)	19	13	1980.88567	1980.88409	158	2+4	RP(17, 0)	16	1	1979.21668	1979.21671	-2	225	RQ(54,30)	54	31	1980.90095	1980.90086	9	2+4	RP(16, 3)	15	4	1979.22917	1979.22859	58	2+4	PP(18,15)	17	14	1980.91472	1980.91546	-73	2+4	PP(18, 3)	17	2	1979.23487	1979.23499	-12	2+4	RQ(55,15)	55	16	1980.95877	1980.95790	87	2+4	PP(19, 6)	18	5	1979.27192	1979.27139	53	2+4	RQ(60, 9)	60	10	1980.95877	1980.96082	-205	2+4	PP(25,21)	24	20	1979.30639	1979.30678	-40	2+4	RP(12, 0)	11	1	1980.97177	1980.97335	-158	2+4	PP(20, 9)	19	8	1979.32546	1979.32552	-6	2+4	PP(13, 3)	12	2	1980.99954	1980.99795	159	2+4	PP(21,12)	20	11	1979.39519	1979.39478	42	225	RQ(52,27)	52	28	1980.99954	1980.99895	60	2+4	PP(26,24)	25	23	1979.41621	1979.41680	-59	225	RQ(53,30)	53	31	1980.99954	1980.99959	-4	2+4	PP(22,15)	21	14	1979.47662	1979.47701	-40	225	RR(20, 6)	21	7	1980.99954	1980.99990	-36	2+4	PP(27,27)	26	26	1979.53417	1979.53423	-6	2+4	PP(19,18)	18	17	1981.01572	1981.01508	64	225	RR(15, 6)	16	7	1979.54214	1979.54212	2	225	RR(21, 3)	22	4	1981.02237	1981.02133	105	2+4	PP(23,18)	22	17	1979.56957	1979.57043	-86	2+4	PP(14, 6)	13	5	1981.04178	1981.04209	-31	2+4	RP(15, 3)	14	4	1979.58197	1979.58144	53	2+4	RQ(54,15)	54	16	1981.05600	1981.05460	140	2+4	PP(17, 3)	16	2	1979.59085	1979.59090	-4	2+4	RQ(51,24)	51	25	1981.06098	1981.06167	-70	2+4	RP(14, 6)	13	7	1979.61845	1979.61820	25	2+4	RQ(59, 9)	59	10	1981.06098	1981.06237	-140	2+4	PP(18, 6)	17	5	1979.62878	1979.62883	-5	225	RQ(51,27)	51	28	1981.09191	1981.09303	-111	2+4	PP(24,21)	23	20	1979.67323	1979.67355	-32	2+4	PP(15, 9)	14	8	1981.10430	1981.10398	32	2+4	PP(19, 9)	18	8	1979.68371	1979.68449	-78	2+4	RQ(52,18)	52	19	1981.10430	1981.10630	-200	225	RR(14,12)	15	13	1979.70662	1979.70500	162	2+4	RQ(56,12)	56	13	1981.10430	1981.10658	-227	2+4	PP(20,12)	19	11	1979.75527	1979.75529	-2	2+4	RQ(53,15)	53	16	1981.15106	1981.14950	156	2+4	PP(25,24)	24	23	1979.78512	1979.78511	1	2+4	RQ(50,24)	50	25	1981.15106	1981.15291	-184	225	RR(15, 9)	16	10	1979.78512	1979.78528	-16	2+4	RQ(58, 9)	58	10	1981.16143	1981.16230	-87	225	RR(16, 6)	17	7	1979.83928	1979.83748	179	225	RR(19,12)	20	13	1981.17361	1981.17416	-55	2+4	PP(21,15)	20	14	1979.83928	1979.83907	21	2+4	PP(16,12)	15	11	1981.18123	1981.18099	24	2+4	RP(15, 0)	14	1	1979.92428	1979.92442	-14	2+4	RQ(51,18)	51	19	1981.19825	1981.19692	133	2+4	RP(14, 3)	13	4	1979.93367	1979.93261	106	225	RR(18,18)	19	19	1981.21353W	1981.21859	-506	2+4	PP(22,18)	21	17	1979.93367	1979.93403	-36	2+4	RQ(49,24)	49	25	1981.24293	1981.24239	54	2+4	PP(16, 3)	15	2	1979.94493	1979.94515	-21	2+4	RQ(52,15)	52	16	1981.24293	1981.24261	32	2+4	RP(13, 6)	12	7	1979.96930	1979.96783	147	225	RR(20, 9)	21	10	1981.24293	1981.24397	-104	2+4	PP(17, 6)	16	5	1979.98530	1979.98462	68	2+4	RQ(60, 6)	60	7	1981.25772	1981.25713	58	225	RR(15,12)	16	13	1980.00363	1980.00259	104	2+4	RQ(57, 9)	57	10	1981.25772	1981.26058	-286	2+4	PP(23,21)	22	20	1980.03946	1980.03869	77	2+4	PP(17,15)	16	14	1981.27202	1981.27099	103	2+4	PP(18, 9)	17	8	1980.03946	1980.04183	-237	225	RQ(50,30)	50	31	1981.28697	1981.28501	196	225	RR(16, 9)	17	10	1980.08013	1980.08081	-68	225	RR(21, 6)	22	7	1981.28697	1981.28574	123	2+4	PP(19,12)	18	11	1980.11376	1980.11417	-41	2+4	RQ(50,18)	50	19	1981.28697	1981.28586	110	225	RR(17, 6)	18	7	1980.12881	1980.13095	-214	225	RR(22, 3)	23	4	1981.30688	1981.30507	180	2+4	PP(24,24)	23	23	1980.15255	1980.15181	74	2+4	RP(11, 0)	10	1	1981.31989	1981.31961	27	2+4	PP(20,15)	19	14	1980.19930	1980.19950	-20	2+4	RP(10, 3)	9	4	1981.31989	1981.32053	-65	2+4	RP(14, 0)	13	1	1980.27535	1980.27575	-41	2+4	RQ(48,24)	48	25	1981.32964	1981.33011	-47	2+4	RP(13, 3)	12	4	1980.28199	1980.28211	-12	2+4	*Q(51,15)	51	19	1981.33503	1981.33391	111	2+4	PP(21,18)	20	17	1980.29654	1980.29601	54	2+4	PP(12, 3)	11	2	1981.34570	1981.34557	14	225	RR(16,12)	17	13	1980.29654	1980.29831	-177	2+4	*Q(53,12)	53	16	1981.34570	1981.34699	-129	2+4	PP(16, 6)	15	5	1980.33837	1980.33876	-39	2+4	RQ(59, 6)	59	7	1981.36041	1981.35827	214	225	RQ(58,27)	58	28	1980.39793	1980.39733	60	225	RR(19,15)	20	16	1981.36041	1981.36055	-14	2+4	PP(17, 9)	16	8	1980.39793	1980.39752	41	2+4	RQ(48,21)	48	22	1981.36041	1981.36230	-189	2+4	PP(22,21)	21	20	1980.40286	1980.40222	63	2+4	RQ(51,15)	51	16	1981.37267	1981.37156	111	225	RR(18, 6)	19	7	1980.42157	1980.42251	-94	2+4	PP(18,18)	17	17	1981.37267	1981.37217	50	225	RR(19, 3)	20	4	1980.44573	1980.44809	-236	2+4	RQ(49,18)	49	19	1981.37267	1981.37313	-46	2+4	PP(18,12)	17	11	1980.47168	1980.47142	26	2+4	RQ(53,12)	53	13	1981.39102	1981.38968	134	225	RR(16,15)	17	16	1980.48077W	1980.48398	-321	2+4	PP(13, 6)	12	5	1981.39102	1981.39128	-26	225	RQ(57,27)	57	28	1980.50286	1980.50201	86	2+4	RQ(47,24)	47	25	1981.41417	1981.41608	-191	2+4	RQ(57,21)	57	22	1980.52256	1980.52003	253	2+4	*Q(50,15)	50	19	1981.42470	1981.42343	127	2+4	PP(19,15)	18	14	1980.55871	1980.55829	42	2+4	PP(14, 9)	13	8	1981.45652	1981.45474	178	2+4	RQ(56,24)	56	25	1980.58053	1980.57929	125	2+4	RQ(58, 6)	58	7	1981.45652	1981.45777	-125	225	RQ(56,27)	56	28	1980.60546	1980.60492	54	2+4	RQ(50,15)	50	16	1981.45652	1981.45867	-215	2+4	RP(13, 0)	12	1	1980.62761	1980.62540	221	2+4	RQ(48,18)	48	19	1981.45652	1981.45872	-220	2+4	RQ(57,18)	57	19	1980.62761	1980.62856	-96	225	RQ(48,30)	48	31	1981.46645	1981.46630	15	2+4	RP(12, 3)	11	4	1980.62761	1980.62993	-233	2+4	RQ(52,12)	52	13	1981.48160	1981.48055	105	2+4	PP(14, 3)	13	2	1980.64678	1980.64868	-189	2+4	RQ(46,24)	46	25	1981.50045	1981.50028	17	2+4	PP(20,18)	19	17	1980.65691	1980.65636	55	225	RR(19,18)	20	19	1981.51182	1981.50919	263	2+4	RQ(58,15)	58	16	1980.65691	1980.65696	-5	2+4	*Q(49,15)	49	19	1981.51182	1981.51115	67	2+4	RQ(55,24)	55	25	1980.67969	1980.67925	44	225	RR(21, 9)	22	10	1981.53250	1981.53001	249	2+4	PP(15, 6)	14	5	1980.69011	1980.69125	-115	2+4	RQ(51,12)	51	13	1981.53250	1981.53205	45	225	RR(19, 6)	20	7	1980.71272	1980.71216	56	2+4	PP(15,12)	14	11	1981.53250	1981.53332	-82	2+4	RQ(55,21)	55	22	1980.71996	1980.71921	75	2+4	RQ(47,18)	47	19	1981.54436	1981.54261	176	2+4	RQ(56,18)	56	19	1980.72818	1980.72736	82	2+4	RQ(49,15)	49	16	1981.54436	1981.54407	30	225	RR(20, 3)	21	4	1980.73475	1980.73566	-92	2+4	RQ(54, 9)	54	10	1981.54436	1981.54557	-120	2+4	PP(16, 9)	15	8	1980.75133	1980.75157	-25	225	RR(22, 6)	23	7	1981.57337W	1981.56967	370	2+4	PP(21,21)	20	20	1980.76389	1980.76412	-24	225	RR(23, 3)	24	4	1981.58755	1981.58690	65	2+4	RQ(54,24)	54	25	1980.77906	1980.77

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2+4 RP(9, 3)	8 4	1981.66399	1981.66331	68	2+4 *Q(43,12)	43 16	1982.20144	1982.20047	97
2+4 RQ(44,24)	44 25	1981.66399	1981.66340	59	2+4 RQ(37,21)	37 22	1982.20144	1982.20092	51
2+4 RP(10, 0)	9 1	1981.66399	1981.66419	-20	2+4 RQ(40,15)	40 16	1982.22021	1982.22025	-4
2+4 *Q(47,15)	47 19	1981.67992	1981.68123	-131	225 RR(22,15)	23 16	1982.22021	1982.22026	-5
2+4 PP(11, 3)	10 2	1981.69096	1981.69152	-56	2+4 RQ(38,18)	38 19	1982.22021	1982.22068	-48
2+4 RQ(44,21)	44 22	1981.69096	1981.69171	-75	2+4 RQ(43,12)	43 13	1982.22021	1982.22137	-116
2+4 RQ(45,18)	45 19	1981.70717	1981.70529	188	225 RQ(37,27)	37 28	1982.22021	1982.22280	-259
2+4 RQ(47,15)	47 16	1981.70717	1981.70976	-259	2+4 RQ(46, 9)	46 10	1982.23276	1982.23267	9
2+4 *Q(49,12)	49 16	1981.70717	1981.70992	-275	2+4 PP(13,12)	12 11	1982.23276	1982.23305	-30
225 RQ(45,30)	45 31	1981.72425	1981.72468	-43	2+4 RQ(53, 3)	53 4	1982.25701	1982.25804	-103
2+4 RQ(52, 9)	52 10	1981.72425W	1981.72731	-306	2+4 RQ(36,21)	36 22	1982.26756	1982.26665	91
2+4 PP(12, 6)	11 5	1981.74028	1981.73882	147	2+4 RQ(42,12)	42 13	1982.27817	1982.27596	221
2+4 RQ(43,24)	43 25	1981.74028	1981.74231	-202	2+4 RQ(57, 0)	57 1	1982.27817	1982.27834	-17
2+4 RQ(49,12)	49 13	1981.74028	1981.74283	-255	2+4 RQ(49, 6)	49 7	1982.27817	1982.27888	-71
2+4 RQ(46,15)	46 16	1981.76419	1981.76359	60	225 RQ(36,27)	36 28	1982.28872	1982.29004	-132
2+4 RQ(43,21)	43 22	1981.77057	1981.76971	86	2+4 *Q(39,15)	39 19	1982.28872	1982.29010	-138
225 RQ(43,27)	43 28	1981.78135	1981.78158	-23	2+4 RQ(39,15)	39 16	1982.30311	1982.30512	-201
2+4 RQ(44,18)	44 19	1981.78135	1981.78407	-272	2+4 RQ(35,24)	35 25	1982.30827	1982.30970	-143
2+4 RQ(58, 3)	58 4	1981.78587	1981.78773	-185	2+4 RQ(45, 9)	45 10	1982.30827	1982.31105	-278
225 RR(20,18)	21 19	1981.80470W	1981.79793	676	225 RR(23,12)	24 13	1982.30827W	1982.31553	-726
2+4 PP(13, 9)	12 8	1981.80470	1981.80385	85	2+4 RQ(35,21)	35 22	1982.33053	1982.33061	-9
2+4 RQ(42,24)	42 25	1981.81741	1981.81944	-203	2+4 RQ(52, 3)	52 4	1982.34726	1982.34715	11
2+4 RQ(48,12)	48 13	1981.82774	1981.82683	90	2+4 RP(8, 0)	7 1	1982.34726	1982.34825	-99
2+4 *Q(45,15)	45 19	1981.84617	1981.84417	200	2+4 *Q(41,12)	41 16	1982.34726	1982.34965	-240
2+4 RQ(42,21)	42 22	1981.84617	1981.84596	21	2+4 RQ(36,18)	36 19	1982.35360	1982.35239	121
225 RR(23, 6)	24 7	1981.85850W	1981.85169	682	225 RQ(35,27)	35 28	1982.35360	1982.35547	-187
225 RQ(42,27)	42 28	1981.85850	1981.85961	-110	2+4 RQ(48, 6)	48 7	1982.36192	1982.36181	11
2+4 RQ(43,18)	43 19	1981.85850	1981.86118	-268	2+4 RQ(41,12)	41 13	1982.36860	1982.36737	123
2+4 RQ(45,15)	45 16	1981.87013	1981.86868	146	225 RR(22,18)	23 19	1982.36860	1982.36984	-124
2+4 PP(14,12)	13 11	1981.88423	1981.88401	22	2+4 RQ(38,15)	38 16	1982.37334	1982.37202	132
2+4 RQ(57, 3)	57 4	1981.88423	1981.88509	-86	2+4 RQ(56, 0)	56 1	1982.37334	1982.37237	97
2+4 RQ(41,24)	41 25	1981.89472	1981.89481	-9	2+4 RQ(34,24)	34 25	1982.37334	1982.37262	72
2+4 RQ(50, 9)	50 10	1981.90289	1981.90242	46	2+4 PP(9, 3)	8 2	1982.37887	1982.37844	43
2+4 RQ(41,21)	41 22	1981.91950	1981.92046	-96	2+4 RQ(44, 9)	44 10	1982.38879	1982.38777	102
2+4 *Q(44,15)	44 19	1981.91950W	1981.92296	-346	225 RQ(36,30)	36 31	1982.40138	1982.40191	-53
2+4 RQ(53, 6)	53 7	1981.93149	1981.93052	97	225 RQ(34,27)	34 28	1982.41823	1982.41910	-87
225 RR(21,15)	22 16	1981.93749	1981.93557	193	2+4 RQ(40,12)	40 13	1982.41823W	1982.42155	-332
225 RQ(41,27)	41 28	1981.93749	1981.93584	166	2+4 PP(10, 6)	9 5	1982.42835	1982.42892	-57
2+4 RQ(42,18)	42 19	1981.93749	1981.93651	99	2+4 RQ(47, 6)	47 7	1982.44118	1982.44308	-190
2+4 RQ(44,15)	44 16	1981.94520	1981.94561	-40	2+4 RQ(33,21)	33 22	1982.45374	1982.45326	48
225 RQ(42,30)	42 31	1981.96534	1981.96678	-144	2+4 RQ(43, 9)	43 10	1982.46317	1982.46276	42
2+4 PP(15,15)	14 14	1981.97743	1981.97715	28	2+4 RQ(55, 0)	55 1	1982.46317	1982.46478	-161
2+4 RQ(60, 0)	60 1	1981.98772	1981.98655	118	225 RR(22,21)	23 22	1982.47788	1982.47632	156
2+4 RQ(49, 9)	49 10	1981.98772	1981.98749	24	2+4 RQ(34,18)	34 19	1982.47788	1982.47715	73
2+4 RQ(46,12)	46 13	1981.98772	1981.98973	-200	2+4 RQ(39,12)	39 13	1982.49316	1982.49166	150
2+4 RQ(40,21)	40 22	1981.99472	1981.99320	151	2+4 RQ(32,24)	32 25	1982.49316	1982.49309	6
2+4 RP(9, 0)	8 1	1982.00919	1982.00706	212	2+4 PP(11, 9)	10 8	1982.49772	1982.49713	59
2+4 RQ(41,18)	41 19	1982.00919	1982.01014	-95	2+4 RQ(36,15)	36 16	1982.49772W	1982.50087	-315
225 RQ(40,27)	40 28	1982.00919	1982.01028	-109	2+4 RQ(50, 3)	50 4	1982.52013	1982.52041	-28
2+4 RQ(52, 6)	52 7	1982.02156	1982.02010	146	2+4 RQ(46, 6)	46 7	1982.52013	1982.52267	-254
2+4 RQ(43,15)	43 16	1982.02156	1982.02086	71	2+4 RQ(42, 9)	42 10	1982.53609	1982.53613	-4
225 RR(22,12)	23 13	1982.03445	1982.03302	143	2+4 RQ(33,18)	33 19	1982.53609	1982.53692	-83
2+4 PP(10, 3)	9 2	1982.03445	1982.03581	-136	2+4 RQ(31,24)	31 25	1982.55122	1982.55065	56
225 RQ(41,30)	41 31	1982.04280	1982.04385	-105	2+4 *Q(35,15)	35 19	1982.55122	1982.55151	-29
2+4 RQ(45,12)	45 13	1982.04280	1982.04412	-132	2+4 RQ(38,12)	38 13	1982.56235	1982.55996	240
2+4 RQ(39,21)	39 22	1982.06557	1982.06420	137	2+4 RQ(35,15)	35 16	1982.56235	1982.56282	-47
2+4 RQ(48, 9)	48 10	1982.07178	1982.07088	89	2+4 RQ(31,21)	31 22	1982.56978	1982.56884	94
2+4 RQ(40,18)	40 19	1982.08332	1982.08205	127	2+4 PP(12,12)	11 11	1982.58063	1982.58046	17
225 RQ(39,27)	39 28	1982.08332	1982.08292	41	2+4 RQ(32,18)	32 19	1982.59603	1982.59494	108
2+4 PP(11, 6)	10 5	1982.08332	1982.08470	-138	225 RR(24,12)	25 13	1982.59603	1982.59615	-13
225 RR(21,18)	22 19	1982.08332	1982.08482	-149	2+4 RQ(49, 3)	49 4	1982.60597	1982.60455	141
2+4 RQ(59, 0)	59 1	1982.08332	1982.08543	-211	2+4 RQ(30,24)	30 25	1982.60597	1982.60643	-46
2+4 RQ(42,15)	42 16	1982.09597	1982.09443	154	2+4 RQ(41, 9)	41 10	1982.60597	1982.60780	-184
2+4 RQ(51, 6)	51 7	1982.10726	1982.10802	-77	2+4 RQ(34,15)	34 16	1982.62476	1982.62314	162
225 RQ(40,30)	40 31	1982.11940	1982.11910	30	2+4 RQ(30,21)	30 22	1982.62476	1982.62398	78
2+4 RQ(44,12)	44 13	1982.12374	1982.12319	55	2+4 RQ(37,12)	37 13	1982.62476	1982.62645	-169
2+4 RQ(38,21)	38 22	1982.13291	1982.13344	-54	2+4 RQ(53, 0)	53 1	1982.64292	1982.64473	-181
2+4 *Q(41,15)	41 19	1982.15036	1982.14861	175	2+4 RQ(31,18)	31 19	1982.65195	1982.65122	72
2+4 PP(12, 9)	11 8	1982.15036	1982.15131	-95	225 RR(23,18)	24 19	1982.65195	1982.65300	-105
2+4 RQ(39,18)	39 19	1982.15036	1982.15223	-187	2+4 RQ(29,24)	29 25	1982.66169	1982.66041	128
2+4 RQ(47, 9)	47 10	1982.15036	1982.15261	-225	2+4 RQ(44, 6)	44 7	1982.67742	1982.67684	58
2+4 RQ(41,15)	41 16	1982.16579	1982.16632	-53	2+4 RQ(29,21)	29 22	1982.67742	1982.67736	6
2+4 RQ(54, 3)	54 4	1982.16579	1982.16727	-148	2+4 RQ(40, 9)	40 10	1982.67742	1982.67779	-37
2+4 RQ(37,24)	37 25	1982.17905	1982.17852	53	2+4 RQ(33,15)	33 16	1982.67742W	1982.68181	-439
2+4 RQ(58, 0)	58 1	1982.17905W	1982.18269	-364	2+4 RQ(48, 3)	48 4	1982.68676	1982.68703	-28
225 RR(21,21)	22 22	1982.19245	1982.19094	151	2+4 RP(7, 0)	6 1	1982.68676	1982.68774	-99
225 RQ(39,30)	39 31	1982.19245	1982.19253	-9	2+4 RQ(36,12)	36 13	1982.70314	1982.70314	0
2+4 RQ(50, 6)	50 7	1982.19245	1982.19429	-184	2+4 RQ(30,18)	30 19	1982.70314	1982.70576	-261

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
2+4 PP(8, 3)	7	2	1982.71953	1982.71940	13	2+4 RQ(22,15)	22	16	1983.21731	1983.21662	69
2+4 *Q(32,15)	32	19	1982.73066	1982.72859	208	2+4 RQ(41, 3)	41	4	1983.21731	1983.21778	-47
2+4 RQ(28,21)	28	22	1982.73066	1982.72896	170	2+4 PQ(55, 6)	55	5	1983.21731	1983.21805	-74
2+4 RQ(52, 0)	52	1	1982.73066	1982.73227	-161	2+4 RQ(36, 6)	36	7	1983.22616	1983.22640	-24
2+4 PQ(60, 6)	60	5	1982.73898	1982.73766	131	2+4 RQ(26,12)	26	13	1983.23911	1983.23870	41
2+4 RQ(32,15)	32	16	1982.73898	1982.73883	14	2+4 RQ(21,15)	21	16	1983.25642	1983.25497	144
2+4 RQ(39, 9)	39	10	1982.74717	1982.74608	108	2+4 PQ(50, 3)	50	2	1983.25642	1983.25738	-96
2+4 RQ(43, 6)	43	7	1982.75285	1982.75141	145	2+4 RQ(25,12)	25	13	1983.28577	1983.28369	208
2+4 RQ(35,12)	35	13	1982.75285	1982.75401	-115	2+4 RQ(30, 9)	30	10	1983.28577	1983.28459	118
225 RR(23,21)	24	22	1982.76081	1982.75985	96	2+4 RQ(40, 3)	40	4	1983.28577	1983.28692	-115
2+4 RQ(27,24)	27	25	1982.76081	1982.76300	-219	2+4 RQ(35, 6)	35	7	1983.28577	1983.28753	-176
2+4 RQ(47, 3)	47	4	1982.76998	1982.76785	213	2+4 RQ(45, 0)	45	1	1983.29923	1983.29939	-16
2+4 PP(9, 6)	8	5	1982.76998	1982.77149	-150	2+4 PQ(54, 6)	54	5	1983.30839	1983.30924	-85
2+4 RQ(27,21)	27	22	1982.77896	1982.77880	17	225 RR(25,21)	26	22	1983.32348	1983.32137	212
2+4 RQ(31,15)	31	16	1982.79640	1982.79420	220	2+4 RQ(19,15)	19	16	1983.32348	1983.32647	-299
2+4 RQ(26,24)	26	25	1982.81360	1982.81161	199	2+4 RQ(24,12)	24	13	1983.32348W	1983.32693	-345
2+4 RQ(38, 9)	38	10	1982.81360	1982.81269	91	2+4 RQ(29, 9)	29	10	1983.33686	1983.33593	92
2+4 *Q(34,12)	34	16	1982.81360	1982.81506	-146	2+4 RQ(34, 6)	34	7	1983.34718	1983.34696	22
2+4 RQ(42, 6)	42	7	1982.82467	1982.82431	36	2+4 RQ(39, 3)	39	4	1983.35291	1983.35439	-148
2+4 RQ(34,12)	34	13	1982.82467	1982.82586	-119	2+4 RQ(23,12)	23	13	1983.37102	1983.36844	258
2+4 PQ(59, 6)	59	5	1982.84059W	1982.83700	359	2+4 RQ(44, 0)	44	1	1983.37102	1983.37387	-285
2+4 PP(10, 9)	9	8	1982.84059	1982.84129	-70	2+4 RQ(28, 9)	28	10	1983.38611	1983.38558	53
2+4 RQ(46, 3)	46	4	1982.84841	1982.84701	141	2+4 PP(6, 3)	5	2	1983.39771	1983.39632	138
2+4 RQ(30,15)	30	16	1982.84841	1982.84792	50	2+4 PQ(53, 6)	53	5	1983.39771	1983.39879	-108
2+4 RQ(27,18)	27	19	1982.85695	1982.85887	-192	2+4 RQ(33, 6)	33	7	1983.40502	1983.40471	30
2+4 RQ(25,21)	25	22	1982.87483	1982.87315	168	2+4 RQ(22,12)	22	13	1983.40502W	1983.40820	-319
2+4 RQ(33,12)	33	13	1982.87483	1982.87430	53	2+4 RQ(38, 3)	38	4	1983.41995	1983.42019	-23
225 RR(25,12)	26	13	1982.87483	1982.87488	-5	2+4 RQ(16,15)	16	16	1983.41995	1983.42069	-74
2+4 RQ(37, 9)	37	10	1982.87483	1982.87761	-278	2+4 PQ(48, 3)	48	2	1983.41995	1983.42222	-227
2+4 RQ(41, 6)	41	7	1982.89593	1982.89552	40	2+4 RQ(27, 9)	27	10	1983.43322	1983.43352	-30
2+4 RQ(29,15)	29	16	1982.90170	1982.89996	175	2+4 RQ(21,12)	21	13	1983.44729	1983.44624	105
2+4 RQ(50, 0)	50	1	1982.90170	1982.90246	-76	2+4 RQ(43, 0)	43	1	1983.44729	1983.44672	57
2+4 RQ(26,18)	26	19	1982.90780	1982.90640	139	2+4 PQ(57, 9)	57	8	1983.45231	1983.45140	91
2+4 PQ(54, 3)	54	2	1982.90780	1982.90804	-24	2+4 PP(7, 6)	6	5	1983.45231	1983.45164	68
2+4 RQ(45, 3)	45	4	1982.92282	1982.92450	-168	2+4 RQ(32, 6)	32	7	1983.46009	1983.46078	-69
2+4 *Q(32,12)	32	16	1982.93252	1982.93173	79	2+4 RQ(26, 9)	26	10	1983.48222	1983.47975	247
225 RR(24,18)	25	19	1982.93252	1982.93429	-177	2+4 RQ(20,12)	20	13	1983.48222	1983.48254	-32
2+4 RQ(36, 9)	36	10	1982.94081	1982.94084	-3	2+4 RQ(37, 3)	37	4	1983.48222	1983.48431	-208
2+4 RQ(32,12)	32	13	1982.94081	1982.94197	-117	2+4 PQ(47, 3)	47	2	1983.50246	1983.50217	29
2+4 RQ(28,15)	28	16	1982.95130	1982.95032	98	2+4 RQ(31, 6)	31	7	1983.51645	1983.51515	130
2+4 RQ(25,18)	25	19	1982.95130	1982.95219	-89	2+4 RQ(19,12)	19	13	1983.51645	1983.51712	-67
2+4 RQ(40, 6)	40	7	1982.96424	1982.96506	-82	2+4 RQ(42, 0)	42	1	1983.51645	1983.51792	-147
2+4 RQ(49, 0)	49	1	1982.98579	1982.98512	67	2+4 RQ(25, 9)	25	10	1983.52528	1983.52428	100
2+4 *Q(31,12)	31	16	1982.98579	1982.98735	-156	2+4 PQ(56, 9)	56	8	1983.54673	1983.54559	114
2+4 RQ(31,12)	31	13	1982.99961	1982.99755	206	2+4 RQ(36, 3)	36	4	1983.54673	1983.54675	-2
2+4 PQ(53, 3)	53	2	1982.99961	1982.99783	178	2+4 RQ(18,12)	18	13	1983.54673W	1983.54996	-323
2+4 RQ(27,15)	27	16	1982.99961	1982.99898	63	2+4 RQ(24, 9)	24	10	1983.56766	1983.56710	55
2+4 RQ(44, 3)	44	4	1982.99961	1983.00032	-71	2+4 RQ(30, 6)	30	7	1983.56766	1983.56783	-17
2+4 RQ(35, 9)	35	10	1982.99961	1983.00237	-276	2+4 PQ(46, 3)	46	2	1983.58079	1983.58048	31
2+4 PQ(57, 6)	57	5	1983.03189	1983.03079	110	2+4 RQ(17,12)	17	13	1983.58079	1983.58108	-29
2+4 RQ(39, 6)	39	7	1983.03189	1983.03292	-103	2+4 RQ(41, 0)	41	1	1983.58745	1983.58748	-3
2+4 RQ(23,18)	23	19	1983.04040	1983.03849	191	2+4 PQ(60,12)	60	11	1983.59603	1983.59593	10
2+4 RQ(30,12)	30	13	1983.04040	1983.04118	-77	2+4 RQ(35, 3)	35	4	1983.60660	1983.60752	-91
225 RR(24,21)	25	22	1983.04040	1983.04153	-113	2+4 RQ(23, 9)	23	10	1983.60660	1983.60822	-162
2+4 RQ(26,15)	26	16	1983.04739	1983.04594	145	2+4 RQ(16,12)	16	13	1983.60660W	1983.61047	-387
2+4 PP(7, 3)	6	2	1983.05704	1983.05869	-165	225 RR(27,15)	28	16	1983.61805	1983.61555	249
2+4 RQ(34, 9)	34	10	1983.06290	1983.06221	70	2+4 RQ(29, 6)	29	7	1983.61805	1983.61882	-77
225 RR(25,15)	26	16	1983.06290	1983.06308	-17	2+4 RQ(15,12)	15	13	1983.63668	1983.63813	-145
2+4 RQ(48, 0)	48	1	1983.06290W	1983.06614	-323	2+4 PQ(55, 9)	55	8	1983.63668	1983.63815	-147
2+4 RQ(43, 3)	43	4	1983.07612	1983.07448	164	2+4 RQ(22, 9)	22	10	1983.64760	1983.64763	-2
2+4 RQ(22,18)	22	19	1983.07612	1983.07901	-289	2+4 RQ(40, 0)	40	1	1983.65537	1983.65540	-3
2+4 RQ(29,12)	29	13	1983.09344	1983.09321	23	2+4 PQ(45, 3)	45	2	1983.65537	1983.65714	-178
2+4 RQ(38, 6)	38	7	1983.09893	1983.09910	-17	2+4 PQ(50, 6)	50	5	1983.65537	1983.65761	-224
225 RR(24,24)	25	25	1983.09893	1983.10168	-274	2+4 RQ(34, 3)	34	4	1983.66716	1983.66660	56
2+4 PP(8, 6)	7	5	1983.11310	1983.11239	71	2+4 RQ(28, 6)	28	7	1983.66716	1983.66812	-95
2+4 RQ(21,18)	21	19	1983.12024	1983.11777	247	2+4 RQ(21, 9)	21	10	1983.68514	1983.68533	-19
2+4 RQ(33, 9)	33	10	1983.12024	1983.12035	-11	2+4 RQ(13,12)	13	13	1983.68514W	1983.68828	-314
2+4 RQ(24,15)	24	16	1983.13541	1983.13473	68	2+4 PQ(59,12)	59	11	1983.69604	1983.69476	128
2+4 RQ(28,12)	28	13	1983.14496	1983.14347	149	2+4 RP(4, 0)	3	1	1983.69604	1983.69603	1
2+4 RQ(47, 0)	47	1	1983.14496	1983.14552	-56	2+4 RQ(27, 6)	27	7	1983.71532	1983.71572	-40
2+4 RQ(42, 3)	42	4	1983.14496	1983.14696	-200	2+4 RQ(20, 9)	20	10	1983.72200	1983.72132	68
2+4 PQ(60, 9)	60	8	1983.16137	1983.15908	229	2+4 RQ(39, 0)	39	1	1983.72200	1983.72167	33
2+4 RQ(37, 6)	37	7	1983.16137	1983.16359	-222	2+4 RQ(33, 3)	33	4	1983.72200	1983.72401	-201
2+4 RQ(23,15)	23	16	1983.17605	1983.17654	-49	2+4 PQ(54, 9)	54	8	1983.73089	1983.72908	181
2+4 RQ(32, 9)	32	10	1983.17605	1983.17680	-74	2+4 PQ(44, 3)	44	2	1983.73089	1983.73216	-127
2+4 PP(9, 8)	8	8	1983.18375	1983.18380	-5	2+4 PP(5, 3)	4	2	1983.73089	1983.73228	-139
2+4 RQ(27,12)	27	13	1983.19170	1983.19197	-27	2+4 PQ(49, 6)	49	5	1983.74072	1983.74061	11
225 RR(25,18)	26	19	1983.21731W	1983.21372	359	2+4 RQ(19, 9)	19	10	1983.75702	1983.75560	143

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2+4 RQ(26, 6)	26	7	1983.76179	1983.76163	16	2+4 PQ(36, 3)	36	2	1984.27356	1984.27281	75
225 RR(27,18)	28	19	1983.76866	1983.76699	168	2+4 PQ(42, 6)	42	5	1984.27356	1984.27555	-199
2+4 RQ(32, 3)	32	4	1983.77993	1983.77974	19	2+4 RQ(21, 3)	21	4	1984.28181	1984.28166	15
2+4 RQ(38, 0)	38	1	1983.78810	1983.78631	179	2+4 RQ(9, 6)	9	7	1984.28181	1984.28236	-54
2+4 RQ(18, 9)	18	10	1983.78810	1983.78817	-7	2+4 RQ(29, 0)	29	1	1984.29353	1984.29385	-32
2+4 PP(6, 6)	5	5	1983.78810	1983.78922	-112	2+4 RQ(20, 3)	20	4	1984.31672	1984.31718	-46
2+4 PQ(43, 3)	43	2	1983.80633	1983.80553	81	2+4 PQ(47, 9)	47	8	1984.31672W	1984.31978	-306
2+4 RQ(25, 6)	25	7	1983.80633	1983.80584	49	2+4 PQ(35, 3)	35	2	1984.33302	1984.33294	8
2+4 PQ(53, 9)	53	8	1983.81962	1983.81837	125	2+4 PQ(52,12)	52	11	1984.34132	1984.34105	27
2+4 RQ(17, 9)	17	10	1983.81962	1983.81902	59	2+4 RQ(28, 0)	28	1	1984.34132	1984.34199	-67
2+4 PQ(48, 6)	48	5	1983.81962	1983.82196	-235	2+4 PQ(41, 6)	41	5	1984.34805	1984.34539	267
2+4 RQ(31, 3)	31	4	1983.83325	1983.83379	-54	2+4 RQ(19, 3)	19	4	1984.34805	1984.35100	-295
2+4 RQ(16, 9)	16	10	1983.84772	1983.84817	-45	2+4 RQ(18, 3)	18	4	1984.38277	1984.38314	-37
2+4 RQ(24, 6)	24	7	1983.84772	1983.84837	-64	2+4 RQ(27, 0)	27	1	1984.38893	1984.38847	45
2+4 RQ(37, 0)	37	1	1983.84772	1983.84929	-157	2+4 PQ(34, 3)	34	2	1984.38893	1984.39142	-249
225 RR(27,21)	28	22	1983.87664	1983.87548	116	2+4 PQ(46, 9)	46	8	1984.39882	1984.39761	121
2+4 RQ(15, 9)	15	10	1983.87664	1983.87560	103	2+4 PQ(40, 6)	40	5	1984.41379	1984.41357	22
2+4 PQ(42, 3)	42	2	1983.87664	1983.87724	-60	2+4 RQ(17, 3)	17	4	1984.41379	1984.41358	21
2+4 RQ(30, 3)	30	4	1983.88636	1983.88616	21	2+4 PQ(51,12)	51	11	1984.42746	1984.42685	60
2+4 PQ(57,12)	57	11	1983.88636	1983.88756	-119	2+4 PQ(56,15)	56	14	1984.43313	1984.43096	217
225 RR(28,15)	29	16	1983.88636	1983.88897	-261	2+4 RQ(26, 0)	26	1	1984.43313	1984.43331	-18
2+4 RQ(23, 6)	23	7	1983.88636	1983.88919	-283	2+4 RQ(16, 3)	16	4	1984.44236	1984.44234	2
2+4 RQ(14, 9)	14	10	1983.90223	1983.90133	91	2+4 PQ(33, 3)	33	2	1984.44791	1984.44823	-31
2+4 PQ(47, 6)	47	5	1983.90223	1983.90167	56	2+4 RQ(15, 3)	15	4	1984.47061	1984.46941	121
2+4 PQ(52, 9)	52	8	1983.90860	1983.90603	257	2+4 PQ(45, 9)	45	8	1984.47571	1984.47380	190
2+4 RQ(36, 0)	36	1	1983.90860	1983.91063	-203	2+4 RQ(25, 0)	25	1	1984.47571	1984.47648	-78
2+4 RQ(13, 9)	13	10	1983.92683	1983.92533	149	2+4 PQ(39, 6)	39	5	1984.48032	1984.48010	22
2+4 RQ(22, 6)	22	7	1983.92683	1983.92832	-149	2+4 RQ(14, 3)	14	4	1984.49468	1984.49479	-11
2+4 RQ(29, 3)	29	4	1983.93701	1983.93684	16	2+4 RR(29,27)	30	28	1984.50074	1984.49792	282
225 RR(27,24)	28	25	1983.93701	1983.93693	8	2+4 PQ(32, 3)	32	2	1984.50074	1984.50337	-263
2+4 PQ(41, 3)	41	2	1983.94714	1983.94731	-17	2+4 RQ(24, 0)	24	1	1984.51810	1984.51800	10
2+4 RQ(12, 9)	12	10	1983.94714	1983.94763	-49	2+4 RQ(13, 3)	13	4	1984.51810	1984.51847	-38
2+4 RR(27,27)	28	28	1983.94714	1983.94932	-218	2+4 RQ(12, 3)	12	4	1984.54045	1984.54047	-2
2+4 RQ(21, 6)	21	7	1983.96754	1983.96575	179	2+4 PQ(38, 6)	38	5	1984.54557	1984.54498	59
2+4 RQ(11, 9)	11	10	1983.96754	1983.96821	-67	2+4 PQ(44, 9)	44	8	1984.54557	1984.54835	-278
2+4 RQ(35, 0)	35	1	1983.96754	1983.97033	-279	2+4 PQ(31, 3)	31	2	1984.55706	1984.55686	20
2+4 PQ(46, 6)	46	5	1983.98076	1983.97974	102	2+4 RQ(23, 0)	23	1	1984.55706	1984.55787	-81
2+4 PQ(56,12)	56	11	1983.98076	1983.98151	-75	2+4 RQ(11, 3)	11	4	1984.55706W	1984.56078	-371
2+4 RQ(28, 3)	28	4	1983.98588	1983.98584	4	2+4 RQ(10, 3)	10	4	1984.57793	1984.57939	-146
2+4 RQ(10, 9)	10	10	1983.98588	1983.98708	-120	2+4 PQ(49,12)	49	11	1984.59396	1984.59356	40
2+4 PQ(51, 9)	51	8	1983.99190	1983.99205	-15	2+4 RQ(22, 0)	22	1	1984.59396	1984.59608	-211
2+4 RQ(20, 6)	20	7	1984.00144	1984.00148	-4	2+4 RQ(9, 3)	9	4	1984.59396	1984.59631	-235
2+4 PQ(40, 3)	40	2	1984.01503	1984.01572	-69	2+4 PQ(59,18)	59	17	1984.60894	1984.60664	230
2+4 RQ(34, 0)	34	1	1984.02810	1984.02837	-27	2+4 PQ(37, 6)	37	5	1984.60894	1984.60821	73
2+4 RP(3, 0)	2	1	1984.02810	1984.02874	-63	2+4 PQ(30, 3)	30	2	1984.60894	1984.60868	26
2+4 RQ(27, 3)	27	4	1984.03406	1984.03316	90	2+4 RQ(8, 3)	8	4	1984.60894	1984.61154	-260
2+4 RQ(19, 6)	19	7	1984.03406	1984.03551	-146	2+4 PQ(54,15)	54	14	1984.61568	1984.61359	209
2+4 PQ(60,15)	60	14	1984.04660	1984.04618	42	2+4 PQ(43, 9)	43	8	1984.62177	1984.62126	51
2+4 PQ(45, 6)	45	5	1984.05727	1984.05617	110	2+4 RQ(7, 3)	7	4	1984.62177W	1984.62508	-331
2+4 RQ(18, 6)	18	7	1984.06716	1984.06785	-69	2+4 RQ(21, 0)	21	1	1984.63245	1984.63263	-18
2+4 RQ(26, 3)	26	4	1984.07979	1984.07879	100	2+4 RQ(5, 3)	5	4	1984.64806	1984.64708	97
2+4 PQ(39, 3)	39	2	1984.07979	1984.08248	-269	2+4 PQ(29, 3)	29	2	1984.65808	1984.65884	-76
2+4 RQ(17, 6)	17	7	1984.09809	1984.09849	-40	2+4 RQ(20, 0)	20	1	1984.66829	1984.66752	77
2+4 RQ(25, 3)	25	4	1984.12283	1984.12274	10	2+4 PQ(36, 6)	36	5	1984.66829	1984.66978	-149
2+4 RQ(16, 6)	16	7	1984.12827	1984.12742	85	2+4 PQ(42, 9)	42	8	1984.69172	1984.69252	-80
2+4 RQ(32, 0)	32	1	1984.13731	1984.13952	-221	225 RR(30,21)	31	22	1984.69172	1984.69276	-104
2+4 PQ(59,15)	59	14	1984.14715	1984.14481	234	2+4 RQ(19, 0)	19	1	1984.70145	1984.70075	70
2+4 PQ(38, 3)	38	2	1984.14715	1984.14758	-43	2+4 PQ(53,15)	53	14	1984.70145	1984.70247	-102
225 RR(28,21)	29	22	1984.14715	1984.14976	-261	2+4 PQ(28, 3)	28	2	1984.70797	1984.70734	63
2+4 RQ(15, 6)	15	7	1984.15501	1984.15466	35	2+4 PQ(35, 6)	35	5	1984.73100	1984.72970	130
2+4 PQ(54,12)	54	11	1984.16540	1984.16454	86	2+4 RQ(18, 0)	18	1	1984.73100	1984.73233	-133
2+4 RQ(24, 3)	24	4	1984.16540	1984.16500	40	2+4 PQ(47,12)	47	11	1984.75354	1984.75373	-20
2+4 RQ(14, 6)	14	7	1984.17978	1984.18020	-42	2+4 PQ(27, 3)	27	2	1984.75354	1984.75417	-63
2+4 RQ(31, 0)	31	1	1984.19127	1984.19261	-134	225 RR(30,24)	31	25	1984.75354	1984.75566	-212
2+4 RQ(13, 6)	13	7	1984.20475	1984.20403	72	2+4 PQ(41, 9)	41	8	1984.76363	1984.76214	149
2+4 PQ(43, 6)	43	5	1984.20475	1984.20407	68	2+4 RQ(17, 0)	17	1	1984.76363	1984.76224	138
2+4 RQ(23, 3)	23	4	1984.20475	1984.20557	-82	2+4 PQ(34, 6)	34	5	1984.78843	1984.78796	47
2+4 PQ(37, 3)	37	2	1984.21157	1984.21103	54	2+4 PQ(52,15)	52	14	1984.78843	1984.78971	-128
225 RR(28,24)	29	25	1984.21157	1984.21168	-11	2+4 RQ(16, 0)	16	1	1984.78843	1984.79050	-207
2+4 RR(28,27)	29	28	1984.22496	1984.22453	43	2+4 PQ(57,18)	57	17	1984.79857	1984.79868	-10
2+4 RQ(12, 6)	12	7	1984.22496	1984.22617	-120	2+4 PQ(26, 3)	26	2	1984.79857	1984.79933	-76
2+4 PQ(48, 9)	48	8	1984.24262	1984.24031	232	2+4 RQ(15, 0)	15	1	1984.81651	1984.81710	-58
2+4 PQ(58,15)	58	14	1984.24262	1984.24182	81	2+4 PQ(40, 9)	40	8	1984.83015	1984.83011	4
2+4 RQ(30, 0)	30	1	1984.24262	1984.24406	-143	2+4 PQ(46,12)	46	11	1984.83015	1984.83136	-122
2+4 RQ(22, 3)	22	4	1984.24262	1984.24446	-184	2+4 RQ(14, 0)	14	1	1984.84239	1984.84203	35
2+4 RQ(11, 6)	11	7	1984.24262W	1984.24660	-398	2+4 PQ(25, 3)	25	2	1984.84239	1984.84283	-44
2+4 PQ(53,12)	53	11	1984.25400	1984.25361	39	2+4 RQ(33, 6)	33	5	1984.84239	1984.84457	-218
2+4 RQ(10, 6)	10	7	1984.26553	1984.26533	20	2+4 RQ(13, 0)	13	1	1984.86394	1984.86531	-137

Continued

	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
1											
2											
3											
4											
5	2+4 PQ(51,15)	51 14	1984.87616	1984.87533	84	2+4 PQ(60,24)	60 23	1985.46325	1985.46223	102	
6	2+4 PQ(24, 3)	24 2	1984.88668	1984.88465	202	2+4 PQ(19, 6)	19 5	1985.46325	1985.46279	46	
7	2+4 RQ(12, 0)	12 1	1984.88668	1984.88692	-24	2+4 PQ(29, 9)	29 8	1985.47010	1985.46891	119	
8	2+4 PQ(39, 9)	39 8	1984.89678	1984.89643	35	225 RR(33,21)	34 22	1985.49488	1985.49333	155	
9	2+4 PQ(32, 6)	32 5	1984.89678	1984.89952	-274	2+4 PQ(18, 6)	18 5	1985.49488	1985.49448	40	
10	2+4 RQ(11, 0)	11 1	1984.90687	1984.90687	0	2+4 PQ(43,15)	43 14	1985.50152	1985.50147	4	
11	2+4 PQ(45,12)	45 11	1984.90687	1984.90735	-48	2+4 PQ(49,18)	49 17	1985.50152	1985.50183	-31	
12	2+4 PQ(23, 3)	23 2	1984.92421	1984.92481	-61	2+4 PQ(28, 9)	28 8	1985.51739	1985.51707	32	
13	2+4 RQ(10, 0)	10 1	1984.92421	1984.92516	-95	2+4 PQ(36,12)	36 11	1985.51739	1985.51741	-2	
14	2+4 RQ(9, 0)	9 1	1984.94216	1984.94179	37	2+4 PQ(17, 6)	17 5	1985.52440	1985.52450	-10	
15	2+4 PQ(31, 6)	31 5	1984.95379	1984.95281	98	2+4 PQ(16, 6)	16 5	1985.55273	1985.55286	-12	
16	2+4 RQ(8, 0)	8 1	1984.95379	1984.95676	-297	2+4 PQ(27, 9)	27 8	1985.56249	1985.56357	-108	
17	2+4 PQ(38, 9)	38 8	1984.96215	1984.96111	105	2+4 PQ(42,15)	42 14	1985.57269	1985.57238	31	
18	225 RR(31,21)	32 22	1984.96215	1984.96147	68	2+4 RR(33,27)	34 28	1985.57269	1985.57324	-55	
19	2+4 PQ(22, 3)	22 2	1984.96215	1984.96330	-115	2+4 PQ(35,12)	35 11	1985.57869	1985.57697	172	
20	2+4 RQ(7, 0)	7 1	1984.97067	1984.97006	61	2+4 PQ(15, 6)	15 5	1985.57869	1985.57955	-85	
21	2+4 PQ(60,21)	60 20	1984.98180	1984.98058	121	2+4 PQ(48,18)	48 17	1985.58415	1985.58239	175	
22	2+4 RQ(6, 0)	6 1	1984.98180	1984.98170	9	2+4 PQ(14, 6)	14 5	1985.60643	1985.60457	186	
23	2+4 PQ(44,12)	44 11	1984.98180	1984.98170	9	2+4 PQ(26, 9)	26 8	1985.60643	1985.60842	-199	
24	2+4 PQ(55,18)	55 17	1984.98180	1984.98422	-243	2+4 PQ(13, 6)	13 5	1985.62795	1985.62793	3	
25	2+4 PQ(21, 3)	21 2	1985.00026	1985.00013	13	2+4 PQ(53,21)	53 20	1985.63427	1985.63463	-36	
26	2+4 PQ(30, 6)	30 5	1985.00586	1985.00445	141	2+4 PQ(34,12)	34 11	1985.63427	1985.63489	-61	
27	2+4 PQ(37, 9)	37 8	1985.02478	1985.02413	65	2+4 PQ(41,15)	41 14	1985.64185	1985.64165	20	
28	225 RR(31,24)	32 25	1985.02478	1985.02489	-10	2+4 PQ(12, 6)	12 5	1985.65152	1985.64962	191	
29	2+4 PQ(20, 3)	20 2	1985.03613	1985.03528	85	2+4 PQ(25, 9)	25 8	1985.65152	1985.65161	-9	
30	2+4 RR(31,27)	32 28	1985.04207	1985.03923	284	2+4 RR(1, 0)	2 1	1985.66743	1985.66671	72	
31	2+4 PQ(49,15)	49 14	1985.04207	1985.04167	40	2+4 PQ(11, 6)	11 5	1985.66743	1985.66964	-221	
32	2+4 PQ(43,12)	43 11	1985.05387	1985.05442	-55	2+4 PQ(10, 6)	10 5	1985.69088	1985.68799	289	
33	2+4 PQ(29, 6)	29 5	1985.05387	1985.05442	-56	2+4 PQ(33,12)	33 11	1985.69088	1985.69116	-28	
34	2+4 PQ(19, 3)	19 2	1985.06843	1985.06876	-33	2+4 PQ(24, 9)	24 8	1985.69088	1985.69314	-227	
35	2+4 PQ(54,18)	54 17	1985.07548	1985.07456	92	2+4 PQ(40,15)	40 14	1985.71176	1985.70928	248	
36	2+4 PQ(36, 9)	36 8	1985.08545	1985.08551	-6	2+4 PQ(8, 6)	8 5	1985.72085	1985.71970	115	
37	2+4 PQ(18, 3)	18 2	1985.10055	1985.10057	-2	2+4 PQ(52,21)	52 20	1985.72085	1985.72157	-72	
38	2+4 PQ(28, 6)	28 5	1985.10055	1985.10274	-219	2+4 PQ(23, 9)	23 8	1985.73158	1985.73302	-144	
39	225 RR(32,18)	33 19	1985.11560	1985.11744	-184	2+4 PQ(7, 6)	7 5	1985.73158	1985.73305	-147	
40	2+4 PQ(48,15)	48 14	1985.12301	1985.12239	62	2+4 PQ(6, 6)	6 5	1985.74641	1985.74473	168	
41	2+4 PQ(42,12)	42 11	1985.12301	1985.12549	-247	2+4 PQ(32,12)	32 11	1985.74641	1985.74578	63	
42	2+4 PQ(17, 3)	17 2	1985.13181	1985.13071	110	2+4 PQ(57,24)	57 23	1985.75291	1985.75188	102	
43	2+4 PQ(35, 9)	35 8	1985.14611	1985.14524	87	2+4 PQ(22, 9)	22 8	1985.77196	1985.77124	72	
44	2+4 PQ(27, 6)	27 5	1985.14611W	1985.14939	-329	2+4 PQ(39,15)	39 14	1985.77680	1985.77527	153	
45	2+4 PQ(16, 3)	16 2	1985.15934	1985.15917	17	2+4 PQ(31,12)	31 11	1985.79905	1985.79875	30	
46	2+4 PQ(53,18)	53 17	1985.16493	1985.16327	166	2+4 PQ(51,21)	51 20	1985.80978	1985.80689	289	
47	2+4 PQ(58,21)	58 20	1985.17533	1985.17556	-23	2+4 PQ(21, 9)	21 8	1985.80978	1985.80780	198	
48	2+4 PQ(15, 3)	15 2	1985.18535	1985.18597	-62	2+4 PQ(38,15)	38 14	1985.84108	1985.83962	147	
49	2+4 PQ(26, 6)	26 5	1985.19433	1985.19439	-5	2+4 PQ(20, 9)	20 8	1985.84108	1985.84270	-161	
50	2+4 PQ(41,12)	41 11	1985.19433	1985.19492	-58	2+4 PQ(30,12)	30 11	1985.85052	1985.85007	44	
51	2+4 PQ(47,15)	47 14	1985.20234	1985.20148	86	2+4 PQ(19, 9)	19 8	1985.87605	1985.87594	11	
52	2+4 PQ(34, 9)	34 8	1985.20234	1985.20332	-97	2+4 PQ(44,18)	44 17	1985.88859	1985.88833	26	
53	2+4 PQ(14, 3)	14 2	1985.21075	1985.21109	-33	2+4 PQ(50,21)	50 20	1985.88859	1985.89058	-198	
54	225 RR(32,21)	33 22	1985.22765	1985.22833	-68	2+4 PQ(29,12)	29 11	1985.90076	1985.89975	101	
55	2+4 PQ(13, 3)	13 2	1985.23615	1985.23454	161	2+4 PQ(37,15)	37 14	1985.90076	1985.90232	-156	
56	2+4 PQ(25, 6)	25 5	1985.23615	1985.23772	-157	2+4 PQ(18, 9)	18 8	1985.90941	1985.90752	189	
57	2+4 PQ(52,18)	52 17	1985.25120	1985.25035	85	2+4 PQ(55,24)	55 23	1985.93686	1985.93688	-2	
58	2+4 PQ(12, 3)	12 2	1985.26000W	1985.25631	369	2+4 PQ(17, 9)	17 8	1985.93686	1985.93744	-58	
59	2+4 PQ(33, 9)	33 8	1985.26000	1985.25974	26	2+4 PQ(28,12)	28 11	1985.94817	1985.94777	41	
60	2+4 PQ(40,12)	40 11	1985.26000	1985.26270	-270	2+4 PQ(16, 9)	16 8	1985.96709	1985.96570	139	
	2+4 PQ(11, 3)	11 2	1985.27797	1985.27641	156	2+4 RR(3, 3)	4 4	1985.96709	1985.96591	118	
	2+4 PQ(46,15)	46 14	1985.27797	1985.27893	-96	2+4 RR(2, 0)	3 1	1985.99019	1985.98919	100	
	2+4 PQ(24, 6)	24 5	1985.27797	1985.27939	-142	2+4 PQ(15, 9)	15 8	1985.99408	1985.99230	178	
	225 RR(32,24)	33 25	1985.29175	1985.29228	-53	2+4 PQ(27,12)	27 11	1985.99408	1985.99414	-6	
	2+4 PQ(9, 3)	9 2	1985.31417	1985.31159	258	2+4 PQ(14, 9)	14 8	1986.01856	1986.01724	132	
	2+4 PQ(32, 9)	32 8	1985.31417	1985.31451	-34	225 RR(35,21)	36 22	1986.01856	1986.01775	81	
	2+4 PQ(23, 6)	23 5	1985.32013	1985.31940	74	2+4 PQ(35,15)	35 14	1986.02352	1986.02281	71	
	2+4 PQ(8, 3)	8 2	1985.32794	1985.32667	127	2+4 PQ(26,12)	26 11	1986.03949	1986.03886	63	
	2+4 PQ(39,12)	39 11	1985.32794	1985.32885	-91	2+4 PQ(13, 9)	13 8	1986.03949	1986.04052	-103	
	2+4 PQ(51,18)	51 17	1985.33698	1985.33580	117	2+4 PQ(59,27)	59 26	1986.05135	1986.05024	111	
	2+4 PQ(6, 3)	6 2	1985.35570W	1985.35180	390	2+4 PQ(48,21)	48 20	1986.05135	1986.05307	-172	
	2+4 PQ(45,15)	45 14	1985.35570	1985.35475	95	2+4 PQ(12, 9)	12 8	1986.06283	1986.06213	70	
	2+4 PQ(22, 6)	22 5	1985.35570	1985.35774	-204	2+4 PQ(34,15)	34 14	1986.08139	1986.08059	80	
	2+4 PQ(31, 9)	31 8	1985.36759	1985.36764	-5	2+4 PQ(25,12)	25 11	1986.08139	1986.08193	-54	
	2+4 PQ(38,12)	38 11	1985.39345	1985.39335	10	2+4 PQ(11, 9)	11 8	1986.08139	1986.08209	-70	
	2+4 PQ(21, 6)	21 5	1985.39345	1985.39442	-97	225 RR(35,24)	36 25	1986.08139	1986.08339	-200	
	2+4 PQ(30, 9)	30 8	1985.41850	1985.41910	-61	2+4 RR(35,27)	36 28	1986.10068	1986.09995	73	
	2+4 PQ(50,18)	50 17	1985.41850	1985.41963	-113	2+4 PQ(10, 9)	10 8	1986.10068	1986.10038	30	
	2+4 PQ(44,15)	44 14	1985.42914	1985.42893	21	2+4 PQ(41,18)	41 17	1986.10068	1986.10063	5	
	2+4 PQ(20, 6)	20 5	1985.42914	1985.42944	-30	2+4 PQ(53,24)	53 23	1986.11443	1986.11540	-96	
	2+4 PQ(55,21)	55 20	1985.45597	1985.45587	10	2+4 PQ(24,12)	24 11	1986.12364	1986.12334	29	
	2+4 PQ(37,12)	37 11	1985.45597	1985.45620	-23	2+4 PQ(47,21)	47 20	1986.13268	1986.13187	81	

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PQ(33,15)	33 14	1986.13744	1986.13672	72	2+4 RR(7, 6)	8 7	1986.91893	1986.91834	59
2+4 PQ(58,27)	58 26	1986.14487	1986.14668	-180	2+4 PQ(55,30)	55 29	1986.92384	1986.92326	58
2+4 PQ(23,12)	23 11	1986.16576	1986.16310	265	2+4 PQ(26,18)	26 17	1986.93986	1986.94085	-99
225 RR(36,18)	37 19	1986.16576	1986.16409	167	2+4 PQ(49,27)	49 26	1986.93986	1986.94172	-186
2+4 PQ(40,18)	40 17	1986.16576	1986.16812	-237	2+4 PQ(35,21)	35 20	1986.95057	1986.95017	40
2+4 PQ(32,15)	32 14	1986.19149	1986.19121	28	2+4 PQ(25,18)	25 17	1986.97861W	1986.98372	-511
2+4 PQ(22,12)	22 11	1986.20147	1986.20121	26	2+4 PQ(54,30)	54 29	1987.01128	1987.01313	-185
2+4 PQ(52,24)	52 23	1986.20147	1986.20300	-153	2+4 PQ(48,27)	48 26	1987.02347	1987.02194	153
2+4 PQ(46,21)	46 20	1986.20932	1986.20904	28	2+4 PQ(24,18)	24 17	1987.02347	1987.02495	-148
2+4 PQ(39,18)	39 17	1986.23555	1986.23398	157	2+4 PQ(41,24)	41 23	1987.04992	1987.04987	5
2+4 PQ(21,12)	21 11	1986.23555	1986.23767	-211	2+4 PQ(59,33)	59 32	1987.04992	1987.05171	-180
2+4 PQ(31,15)	31 14	1986.24470	1986.24406	64	2+4 PQ(33,21)	33 20	1987.06386	1987.06365	21
2+4 PQ(20,12)	20 11	1986.27134	1986.27247	-113	2+4 PQ(23,18)	23 17	1987.06386	1987.06453	-67
2+4 PQ(45,21)	45 20	1986.28505	1986.28459	46	2+4 PQ(47,27)	47 26	1987.10166	1987.10054	112
2+4 RR(4, 3)	5 4	1986.28505	1986.28504	1	2+4 PQ(53,30)	53 29	1987.10166	1987.10139	28
2+4 PQ(51,24)	51 23	1986.28505	1986.28741	-237	2+4 PQ(22,18)	22 17	1987.10166	1987.10247	-80
2+4 PQ(30,15)	30 14	1986.29623	1986.29526	97	2+4 PQ(40,24)	40 23	1987.11756	1987.11715	41
2+4 PQ(38,18)	38 17	1986.29623	1986.29820	-197	2+4 PQ(32,21)	32 20	1987.11756	1987.11793	-37
2+4 PQ(19,12)	19 11	1986.30634	1986.30561	73	2+4 PQ(18,18)	21 17	1987.13892	1987.13876	16
2+4 PQ(56,27)	56 26	1986.33560	1986.33470	90	2+4 PQ(58,33)	58 32	1987.14650	1987.14799	-149
2+4 PQ(18,12)	18 11	1986.33560	1986.33710	-150	2+4 PQ(31,21)	31 20	1987.17114	1987.17058	56
225 RR(36,24)	37 25	1986.34522	1986.34340	181	2+4 PQ(20,18)	20 17	1987.17114	1987.17340	-226
2+4 PQ(29,15)	29 14	1986.34522	1986.34481	40	2+4 PQ(39,24)	39 23	1987.18359	1987.18280	80
2+4 PQ(44,21)	44 20	1986.35963	1986.35850	114	2+4 PQ(52,30)	52 29	1987.18875	1987.18802	73
2+4 RR(36,27)	37 28	1986.35963	1986.36056	-92	2+4 PQ(19,18)	19 17	1987.20852	1987.20639	212
2+4 PQ(37,18)	37 17	1986.35963	1986.36078	-114	2+4 PQ(30,21)	30 20	1987.22310	1987.22158	152
2+4 PQ(17,12)	17 11	1986.36775	1986.36694	81	2+4 RR(8, 6)	9 7	1987.23063	1987.23057	6
2+4 PQ(50,24)	50 23	1986.37219	1986.37098	120	2+4 RR(7, 3)	8 4	1987.23063	1987.23222	-158
2+4 PQ(28,15)	28 14	1986.39385	1986.39272	113	2+4 PQ(18,18)	18 17	1987.23978	1987.23774	204
2+4 PQ(16,12)	16 11	1986.39385	1986.39512	-127	2+4 RR(6, 0)	7 1	1987.26181	1987.26204	-23
2+4 PQ(15,12)	15 11	1986.42044	1986.42164	-120	2+4 RR(9, 9)	10 10	1987.26181	1987.26280	-99
2+4 PQ(36,18)	36 17	1986.42044	1986.42172	-128	2+4 PQ(29,21)	29 20	1987.27161	1987.27094	67
2+4 PQ(43,21)	43 20	1986.43045	1986.43077	-33	2+4 PQ(51,30)	51 29	1987.27161	1987.27303	-142
2+4 PQ(27,15)	27 14	1986.43675	1986.43898	-223	2+4 PQ(37,24)	37 23	1987.30934	1987.30919	15
2+4 PQ(14,12)	14 11	1986.44864	1986.44651	213	2+4 PQ(28,21)	28 20	1987.31837	1987.31867	-30
2+4 PQ(60,30)	60 29	1986.44864	1986.44960	-97	2+4 PQ(44,27)	44 26	1987.32610	1987.32657	-47
2+4 PQ(49,24)	49 23	1986.45417	1986.45293	125	2+4 PQ(56,33)	56 32	1987.33574	1987.33568	6
2+4 PQ(35,18)	35 17	1986.48257	1986.48102	155	2+4 PQ(50,30)	50 29	1987.35662	1987.35642	20
2+4 PQ(26,15)	26 14	1986.48257	1986.48359	-101	2+4 PQ(27,21)	27 20	1987.36624	1987.36475	149
2+4 PQ(54,27)	54 26	1986.51759	1986.51625	134	2+4 PQ(36,24)	36 23	1987.37097	1987.36993	103
2+4 PQ(25,15)	25 14	1986.52766	1986.52655	111	2+4 PQ(43,27)	43 26	1987.39794	1987.39865	-72
2+4 PQ(48,24)	48 23	1986.53420	1986.53325	95	2+4 PQ(26,21)	26 20	1987.40914	1987.40919	-5
225 RR(37,21)	38 22	1986.53420	1986.53473	-52	2+4 PQ(55,33)	55 32	1987.42524	1987.42710	-186
2+4 PQ(34,18)	34 17	1986.53975	1986.53868	107	2+4 PQ(35,24)	35 23	1987.42524W	1987.42904	-381
2+4 PQ(59,30)	59 29	1986.54578	1986.54757	-179	2+4 PQ(25,21)	25 20	1987.45256	1987.45198	57
2+4 PQ(24,15)	24 14	1986.56914	1986.56786	128	2+4 PQ(42,27)	42 26	1987.46782	1987.46911	-129
2+4 PQ(41,21)	41 20	1986.56914	1986.57043	-129	2+4 PQ(34,24)	34 23	1987.48461	1987.48652	-191
2+4 PQ(33,18)	33 17	1986.59477	1986.59470	7	2+4 PQ(24,21)	24 20	1987.49493	1987.49314	180
2+4 RR(5, 3)	6 4	1986.60513	1986.60246	267	2+4 PQ(54,33)	54 32	1987.51740	1987.51690	50
2+4 RR(6, 6)	7 7	1986.60513	1986.60440	73	2+4 PQ(48,30)	48 29	1987.51740	1987.51833	-92
2+4 PQ(53,27)	53 26	1986.60513	1986.60459	54	2+4 RR(9, 6)	10 7	1987.54144	1987.54109	35
2+4 PQ(23,15)	23 14	1986.60513	1986.60753	-240	2+4 PQ(33,24)	33 23	1987.54144	1987.54236	-92
2+4 RR(4, 0)	5 1	1986.62841	1986.62903	-63	2+4 RR(8, 3)	9 4	1987.54144W	1987.54454	-310
2+4 PQ(40,21)	40 20	1986.63916	1986.63781	135	2+4 PQ(22,21)	22 20	1987.57155	1987.57052	103
2+4 PQ(22,15)	22 14	1986.64684	1986.64554	130	2+4 RR(10, 9)	11 10	1987.57155	1987.57147	8
2+4 PQ(32,18)	32 17	1986.64684	1986.64908	-224	2+4 PQ(32,24)	32 23	1987.59661	1987.59656	5
2+4 PQ(21,15)	21 14	1986.68296	1986.68191	105	2+4 PQ(47,30)	47 29	1987.59661	1987.59684	-23
2+4 PQ(46,24)	46 23	1986.68867	1986.68900	-33	2+4 PQ(53,33)	53 32	1987.60537	1987.60509	28
2+4 PQ(31,18)	31 17	1986.70244	1986.70182	63	2+4 PQ(40,27)	40 26	1987.60537	1987.60513	23
2+4 PQ(39,21)	39 20	1986.70244	1986.70355	-111	2+4 PR(6, 3)	7 2	1987.63290	1987.63318	-27
2+4 PQ(20,15)	20 14	1986.71723	1986.71662	60	2+4 PQ(31,24)	31 23	1987.64890	1987.64913	-22
2+4 PQ(19,15)	19 14	1986.74894	1986.74969	-75	2+4 PQ(39,27)	39 26	1987.67153	1987.67070	83
2+4 PQ(30,18)	30 17	1986.74894W	1986.75291	-397	2+4 PQ(46,30)	46 29	1987.67153	1987.67373	-220
2+4 PQ(45,24)	45 23	1986.76504	1986.76443	61	2+4 PQ(52,33)	52 32	1987.69183	1987.69165	18
2+4 PQ(38,21)	38 20	1986.76504	1986.76766	-262	2+4 PQ(30,24)	30 23	1987.69932	1987.70005	-73
2+4 PQ(51,27)	51 26	1986.77721	1986.77640	80	2+4 PQ(45,30)	45 29	1987.74968	1987.74900	68
2+4 PQ(18,15)	18 14	1986.78266	1986.78110	156	2+4 PQ(29,24)	29 23	1987.74968	1987.74934	33
2+4 PQ(29,18)	29 17	1986.80298	1986.80236	62	2+4 PQ(51,33)	51 32	1987.77675	1987.77659	16
2+4 PQ(37,21)	37 20	1986.82884	1986.83013	-129	2+4 PQ(37,27)	37 26	1987.79754	1987.79694	60
2+4 PQ(44,24)	44 23	1986.83847	1986.83824	23	2+4 PQ(28,24)	28 23	1987.79754	1987.79699	54
2+4 PQ(16,15)	16 14	1986.83847	1986.83897	-51	2+4 PQ(44,30)	44 29	1987.82334	1987.82264	70
2+4 PQ(28,18)	28 17	1986.85091	1986.85017	74	2+4 PQ(27,24)	27 23	1987.84466	1987.84301	165
2+4 PQ(50,27)	50 26	1986.85998	1986.85988	10	2+4 PQ(56,36)	56 35	1987.84466	1987.84586	-121
2+4 PQ(15,15)	15 14	1986.86651	1986.86543	108	2+4 RR(10, 6)	11 7	1987.85027	1987.84989	38
2+4 PQ(36,21)	36 20	1986.89242	1986.89097	145	2+4 RR(9, 3)	10 4	1987.85615	1987.85517	98
2+4 PQ(27,18)	27 17	1986.89767	1986.89633	134	2+4 PQ(36,27)	36 26	1987.85615	1987.85761	-146
2+4 PQ(43,24)	43 23	1986.91124	1986.91041	83	2+4 RR(11, 9)	12 10	1987.87849	1987.87841	9
2+4 RR(6, 3)	7 4	1986.91893	1986.91819	74	2+4 PQ(26,24)	26 23	1987.88824	1987.88738	86

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2+4	RR(8, 0)	9	1	1987.88824	1987.88821	3	2+4	PQ(38,36)	38	35	1989.24521	1989.24231	290	2+4	PQ(43,30)	43	29	1987.89527	1987.89465	62	2+4	RR(17,15)	18	16	1989.25500	1989.25503	-3	2+4	PQ(35,27)	35	26	1987.91514	1987.91664	-150	2+4	PR(10, 6)	11	5	1989.27308	1989.27293	14	2+4	PQ(25,24)	25	23	1987.93167	1987.93011	156	2+4	PQ(45,39)	45	38	1989.27725	1989.27722	3	2+4	PQ(55,36)	55	35	1987.93718	1987.93722	-4	2+4	PQ(37,36)	37	35	1989.30363	1989.30446	-83	2+4	RR(12,12)	13	13	1987.94752	1987.94650	102	2+4	PQ(51,42)	51	41	1989.32377	1989.32330	47	2+4	PR(7, 3)	8	2	1987.94752	1987.94734	18	2+4	RR(15, 6)	16	7	1989.36871	1989.36821	50	2+4	PQ(42,30)	42	29	1987.96590	1987.96504	86	2+4	RR(14, 3)	15	4	1989.38331	1989.38276	55	2+4	PQ(34,27)	34	26	1987.97545	1987.97405	141	2+4	RR(16, 9)	17	10	1989.38817	1989.38720	97	2+4	PQ(60,39)	60	38	1987.98041	1987.98038	4	2+4	RR(18,18)	19	19	1989.41308	1989.41269	39	2+4	PQ(48,33)	48	32	1988.02198	1988.02168	30	2+4	PQ(43,39)	43	38	1989.42362	1989.42259	103	2+4	PQ(33,27)	33	26	1988.03102	1988.02982	121	2+4	RR(13, 0)	14	1	1989.42362	1989.42365	-3	2+4	PQ(59,39)	59	38	1988.07879	1988.07815	63	2+4	RR(17,12)	18	13	1989.44660	1989.44548	112	2+4	PQ(32,27)	32	26	1988.08519	1988.08395	124	2+4	PR(12, 3)	13	2	1989.49161	1989.49290	-128	2+4	PQ(47,33)	47	32	1988.10124	1988.10013	110	2+4	PQ(55,45)	55	44	1989.49978	1989.50052	-74	2+4	PQ(40,30)	40	29	1988.10124	1988.10092	32	2+4	RR(18,15)	19	16	1989.54949	1989.54928	21	2+4	PQ(31,27)	31	26	1988.13706	1988.13645	61	2+4	PR(11, 6)	12	5	1989.58054	1989.58043	11	2+4	RR(11, 6)	12	7	1988.15667	1988.15698	-32	2+4	PQ(54,45)	54	44	1989.59032	1989.59017	15	2+4	RR(10, 3)	11	4	1988.16496	1988.16409	87	2+4	PQ(47,42)	47	41	1989.64621	1989.64636	-15	2+4	PQ(39,30)	39	29	1988.16496	1988.16642	-146	2+4	RR(16, 6)	17	7	1989.66640	1989.66673	-33	2+4	PQ(58,39)	58	38	1988.17443	1988.17432	12	2+4	RR(15, 3)	16	4	1989.68285	1989.68316	-31	2+4	RR(12, 9)	13	10	1988.18438	1988.18362	75	2+4	RR(17, 9)	18	10	1989.68285	1989.68378	-93	2+4	RR(9, 0)	10	1	1988.19595	1988.19872	-278	2+4	RR(19,18)	20	19	1989.70532	1989.70482	51	2+4	PQ(38,30)	38	29	1988.23161	1988.23029	133	2+4	PQ(46,42)	46	41	1989.72483	1989.72307	176	2+4	RR(13,12)	14	13	1988.25042	1988.24978	64	2+4	RR(14, 0)	15	1	1989.72483	1989.72560	-77	2+4	PQ(45,33)	45	32	1988.25042	1988.25217	-174	2+4	RR(18,12)	19	13	1989.74050	1989.74005	45	2+4	PQ(57,39)	57	38	1988.26733	1988.26886	-153	2+4	PQ(52,45)	52	44	1989.76380	1989.76462	-82	2+4	PQ(28,27)	28	26	1988.28480	1988.28413	67	2+4	PR(13, 3)	14	2	1989.79797	1989.79695	102	2+4	PQ(51,36)	51	35	1988.28480	1988.28648	-168	2+4	PQ(45,42)	45	41	1989.79797	1989.79816	-19	2+4	PQ(44,33)	44	32	1988.32443	1988.32574	-132	2+4	RR(19,15)	20	16	1989.84235	1989.84179	57	2+4	PQ(27,27)	27	26	1988.33463W	1988.33008	454	2+4	PQ(51,45)	51	44	1989.84958	1989.84942	17	2+4	PQ(36,30)	36	29	1988.35247	1988.35313	-66	2+4	PR(12, 6)	13	5	1989.88424	1989.88626	-201	2+4	PQ(56,39)	56	38	1988.36103	1988.36180	-77	2+4	PQ(50,45)	50	44	1989.93419	1989.93259	160	2+4	PQ(43,33)	43	32	1988.39740	1988.39770	-30	2+4	RR(17, 6)	18	7	1989.96425	1989.96353	72	2+4	PQ(49,36)	49	35	1988.45095	1988.45139	-44	2+4	RR(18, 9)	19	10	1989.97941	1989.97862	78	2+4	RR(12, 6)	13	7	1988.46279	1988.46236	43	2+4	RR(16, 3)	17	4	1989.97941	1989.98186	-245	2+4	PQ(34,30)	34	29	1988.47008	1988.46945	63	2+4	RR(20,18)	21	19	1989.99554	1989.99517	38	2+4	RR(11, 3)	12	4	1988.47008	1988.47131	-123	2+4	PQ(49,45)	49	44	1990.01516	1990.01415	101	2+4	RR(13, 9)	14	10	1988.48680	1988.48711	-31	2+4	RR(15, 0)	16	1	1990.02379	1990.02583	-204	2+4	RR(10, 0)	11	1	1988.50777	1988.50753	25	2+4	RR(19,12)	20	13	1990.03362	1990.03286	76	2+4	PQ(48,36)	48	35	1988.53310	1988.53141	168	2+4	PR(14, 3)	15	2	1990.09984	1990.09931	52	2+4	PQ(41,33)	41	32	1988.53915	1988.53672	243	2+4	RR(20,15)	21	16	1990.13249	1990.13253	-4	2+4	PQ(54,39)	54	38	1988.53915W	1988.54281	-366	2+4	PR(13, 6)	14	5	1990.18684W	1990.19040	-356	2+4	RR(14,12)	15	13	1988.55158	1988.55132	26	2+4	RR(21,21)	22	22	1990.20617	1990.20589	28	2+4	PQ(40,33)	40	32	1988.60534	1988.60379	155	2+4	RR(18, 6)	19	7	1990.25870	1990.25861	9	2+4	PQ(53,39)	53	38	1988.63193	1988.63089	104	2+4	RR(19, 9)	20	10	1990.27273	1990.27174	99	2+4	PQ(31,30)	31	29	1988.63193	1988.63169	24	2+4	RR(17, 3)	18	4	1990.27925	1990.27885	40	2+4	RR(15,15)	16	16	1988.66259	1988.66123	135	2+4	RR(21,18)	22	19	1990.28460	1990.28374	86	2+4	PQ(39,33)	39	32	1988.66926	1988.66924	2	2+4	RR(20,12)	21	13	1990.32327	1990.32393	-66	2+4	PQ(46,36)	46	35	1988.68752	1988.68659	93	2+4	RR(16, 0)	17	1	1990.32327	1990.32434	-107	2+4	PQ(52,39)	52	38	1988.71769	1988.71735	33	2+4	PR(15, 3)	16	2	1990.40053	1990.39999	54	2+4	PQ(38,33)	38	32	1988.73336	1988.73305	31	2+4	RR(21,15)	22	16	1990.42145	1990.42152	-7	2+4	PQ(45,36)	45	35	1988.76363	1988.76175	188	2+4	RR(22,21)	23	22	1990.49294	1990.49223	72	2+4	RR(13, 6)	14	7	1988.76363	1988.76603	-240	2+4	PR(14, 6)	15	5	1990.49294	1990.49286	8	2+4	RR(12, 3)	13	4	1988.77583	1988.77683	-100	2+4	RR(19, 6)	20	7	1990.55224	1990.55197	27	2+4	RR(14, 9)	15	10	1988.78809	1988.78887	-78	2+4	RR(20, 9)	21	10	1990.56333	1990.56312	21	2+4	PQ(57,42)	57	41	1988.78809	1988.79015	-206	2+4	RR(22,18)	23	19	1990.57181	1990.57053	128	2+4	PQ(51,39)	51	38	1988.80251	1988.80220	31	2+4	RR(18, 3)	19	4	1990.57181	1990.57413	-232	2+4	RR(11, 0)	12	1	1988.81296	1988.81462	-165	2+4	RR(21,12)	22	13	1990.61247	1990.61324	-77	2+4	PQ(44,36)	44	35	1988.83585	1988.83528	58	2+4	RR(17, 0)	18	1	1990.62137	1990.62113	24	2+4	RR(15,12)	16	13	1988.85158	1988.85112	46	2+4	PR(16, 3)	17	2	1990.69734	1990.69898	-164	2+4	PR(10, 3)	11	2	1988.88073	1988.87973	100	2+4	RR(22,15)	23	16	1990.70823	1990.70875	-52	2+4	PQ(56,42)	56	41	1988.88073	1988.88305	-232	2+4	RR(23,21)	24	22	1990.77639	1990.77677	-37	2+4	PQ(50,39)	50	38	1988.88538	1988.88542	-4	2+4	PR(15, 6)	16	5	1990.79362	1990.79364	-2	2+4	PQ(43,36)	43	35	1988.90679	1988.90718	-39	2+4	RR(20, 6)	21	7	1990.84359	1990.84361	-3	2+4	PQ(35,33)	35	32	1988.91287	1988.91472	-185	2+4	RR(21, 9)	22	10	1990.85433	1990.85277	156	2+4	RR(16,15)	17	16	1988.95963	1988.95901	62	2+4	RR(23,18)	24	19	1990.85433	1990.85554	-121	2+4	PQ(49,39)	49	38	1988.96753	1988.96702	51	2+4	RR(19, 3)	20	4	1990.86717	1990.86771	-54	2+4	PQ(34,33)	34	32	1988.97532W	1988.97202	331	2+4	RR(22,12)	23	13	1990.90157	1990.90080	77	2+4	PQ(55,42)	55	41	1988.97532	1988.97433	99	2+4	PR(14, 9)	15	8	1990.90157W	1990.90556	-400	2+4	PQ(41,36)	41	35	1989.04518	1989.04611	-93	2+4	RR(18, 0)	19	1	1990.91626	1990.91620	6	2+4	RR(14, 6)	15	7	1989.06609	1989.06798	-189	2+4	RR(23,15)	24	16	1990.99496	1990.99424	72	2+4	RR(13, 3)	14	4	1989.08013	1989.08065	-52	2+4	PR(17, 3)	18	2	1990.99496	1990.99628	-132	2+4	RR(15, 9)	16	10	1989.08896	1989.08890	7	2+4	RR(24,24)	25	25	1991.04426	1991.04452	-26	2+4	RR(12, 0)	13	1	1989.11883	1989.11999	-117	2+4	RR(24,21)	25	22	1991.05987	1991.05950	37	2+4	RR(16,12)	17	13	1989.14818	1989.14917	-100	2+4	PR(16, 6)	17	5	1991.09303	1991.09274	29	2+4	PR(11, 3)	12	2	1989.18463	1989.18716	-253	2+4	RR(21, 6)	22	7	1991.13375	1991.13354	21	2+4	PQ(46,39)	46	38	1989.20124	1989.20211

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(I)		(II)		(III)	(IV)	(V)	(I)		(II)	(III)	(IV)	(V)	
2+4	RR(22, 9)	23	10	1991.14030	1991.14069	-40	225	RR(30,30)	31	31	1992.86281	1992.86257	23
2+4	RR(20, 3)	21	4	1991.15908	1991.15957	-50	2+4	RR(29,12)	30	13	1992.86281	1992.86409	-129
2+4	RR(23,12)	24	13	1991.18732	1991.18660	72	2+4	RR(26, 3)	27	4	1992.87454	1992.87486	-32
2+4	PR(15, 9)	16	8	1991.20829	1991.20643	186	2+4	RR(25, 0)	26	1	1992.93369	1992.93356	13
2+4	RR(19, 0)	20	1	1991.20829	1991.20956	-127	2+4	*R(30,15)	31	19	1992.93369	1992.93383	-15
2+4	RR(24,15)	25	16	1991.27856	1991.27797	59	2+4	RR(30,15)	31	16	1992.94459	1992.94403	56
2+4	PR(18, 3)	19	2	1991.29121	1991.29189	-69	2+4	RR(31,24)	32	25	1992.96893	1992.96911	-18
2+4	RR(25,24)	26	25	1991.32455	1991.32492	-37	2+4	PR(21, 9)	22	8	1992.97695	1992.97638	57
2+4	RR(25,21)	26	22	1991.34072	1991.34044	28	2+4	RR(31,21)	32	22	1992.98870	1992.98829	42
2+4	PR(17, 6)	18	5	1991.39026	1991.39015	11	225	RR(31,27)	32	28	1993.01609	1993.01658	-49
2+4	RR(25,18)	26	19	1991.42157	1991.42023	134	2+4	PR(24, 3)	25	2	1993.02906	1993.03003	-97
2+4	RR(22, 6)	23	7	1991.42157	1991.42175	-18	2+4	RR(31,18)	32	19	1993.07194	1993.07159	35
2+4	RR(23, 9)	24	10	1991.42785	1991.42688	96	2+4	RR(29, 9)	30	10	1993.10794	1993.10765	29
2+4	RR(21, 3)	22	4	1991.44942	1991.44973	-31	2+4	RR(28, 6)	29	7	1993.11491	1993.11484	7
2+4	RR(24,12)	25	13	1991.47140	1991.47063	77	2+4	PR(20,12)	21	11	1993.11491	1993.11536	-44
2+4	RR(20, 0)	21	1	1991.50116	1991.50120	-4	225	RR(31,30)	32	31	1993.13011	1993.13075	-64
2+4	RR(25,15)	26	16	1991.56083	1991.55997	86	2+4	RR(30,12)	31	13	1993.13821	1993.13738	83
2+4	PR(19, 3)	20	2	1991.58657	1991.58581	76	2+4	PR(23, 6)	24	5	1993.13821	1993.13925	-105
2+4	RR(26,24)	27	25	1991.60354	1991.60350	4	2+4	RR(27, 3)	28	4	1993.15456	1993.15475	-19
2+4	RR(26,21)	27	22	1991.61937	1991.61958	-21	2+4	*R(31,15)	32	19	1993.20600	1993.20548	52
2+4	PR(18, 6)	19	5	1991.68326	1991.68588	-262	2+4	RR(26, 0)	27	1	1993.21519	1993.21486	33
2+4	RR(26,18)	27	19	1991.69979	1991.69990	-11	2+4	RR(31,15)	32	16	1993.21519	1993.21573	-54
2+4	RR(23, 6)	24	7	1991.70938	1991.70823	115	2+4	RR(32,24)	33	25	1993.23655	1993.23677	-22
2+4	RR(24, 9)	25	10	1991.70938	1991.71134	-196	2+4	RR(32,21)	33	22	1993.25678	1993.25663	14
2+4	RR(22, 3)	23	4	1991.73752	1991.73818	-66	2+4	PR(22, 9)	23	8	1993.26583	1993.26549	34
2+4	RR(25,12)	26	13	1991.75223	1991.75289	-66	225	RR(32,27)	33	28	1993.28313	1993.28356	-43
2+4	RR(21, 0)	22	1	1991.79042	1991.79111	-69	2+4	PR(25, 3)	26	2	1993.31349	1993.31379	-30
2+4	PR(17, 9)	18	8	1991.80468	1991.80313	155	2+4	RR(32,18)	33	19	1993.34067	1993.34059	8
2+4	RR(26,15)	27	16	1991.84079	1991.84022	56	2+4	RR(30, 9)	31	10	1993.38158	1993.38172	-14
2+4	PR(20, 3)	21	2	1991.87932	1991.87804	128	2+4	RR(29, 6)	30	7	1993.39173	1993.39100	73
2+4	RR(27,24)	28	25	1991.87932	1991.88026	-94	225	RR(32,30)	33	31	1993.39712	1993.39706	6
2+4	RR(27,21)	28	22	1991.89717	1991.89692	25	2+4	PR(21,12)	22	11	1993.40829	1993.40625	204
225	RR(27,27)	28	28	1991.92910	1991.93026	-117	2+4	RR(31,12)	32	13	1993.40829	1993.40883	-54
2+4	RR(27,18)	28	19	1991.97844	1991.97780	64	2+4	PR(24, 6)	25	5	1993.42362	1993.42487	-125
2+4	PR(19, 6)	20	5	1991.97844	1991.97993	-149	2+4	RR(28, 3)	29	4	1993.43253	1993.43292	-39
2+4	RR(24, 6)	25	7	1991.99349	1991.99300	50	2+4	*R(32,15)	33	19	1993.47599	1993.47530	68
2+4	RR(25, 9)	26	10	1991.99349	1991.99407	-58	2+4	RR(32,15)	33	16	1993.48622	1993.48574	48
2+4	RR(23, 3)	24	4	1992.02443	1992.02491	-48	2+4	RR(27, 0)	28	1	1993.49398	1993.49444	-46
2+4	RR(26,12)	27	13	1992.03379	1992.03338	41	2+4	RR(33,24)	34	25	1993.50241	1993.50262	-21
2+4	RR(22, 0)	23	1	1992.07957	1992.07930	26	2+4	RR(33,21)	34	22	1993.52315	1993.52318	-2
2+4	PR(18, 9)	19	8	1992.09955	1992.09896	58	225	RR(33,27)	34	28	1993.54834	1993.54869	-36
2+4	RR(27,15)	28	16	1992.11874	1992.11875	-1	2+4	PR(23, 9)	24	8	1993.55470	1993.55292	177
2+4	RR(28,24)	29	25	1992.15504	1992.15520	-16	2+4	PR(26, 3)	27	2	1993.59595	1993.59587	9
2+4	PR(21, 3)	22	2	1992.17143	1992.16857	286	2+4	RR(33,18)	34	19	1993.60838	1993.60782	56
2+4	RR(28,21)	29	22	1992.17143	1992.17246	-103	2+4	RR(31, 9)	32	10	1993.65461	1993.65405	56
225	RR(28,27)	29	28	1992.20397	1992.20460	-63	225	RR(33,30)	34	31	1993.66162	1993.66152	10
2+4	RR(28,18)	29	19	1992.25382	1992.25391	-9	2+4	RR(30, 6)	31	7	1993.66628	1993.66543	85
2+4	PR(20, 6)	21	5	1992.27446	1992.27229	218	2+4	RR(32,12)	33	13	1993.67851	1993.67844	7
2+4	RR(26, 9)	27	10	1992.27446	1992.27506	-60	2+4	PR(22,12)	23	11	1993.69524	1993.69546	-23
2+4	RR(25, 6)	26	7	1992.27446	1992.27604	-157	2+4	PR(25, 6)	26	5	1993.70842	1993.70880	-37
2+4	RR(24, 3)	25	4	1992.31087	1992.30994	93	2+4	RR(29, 3)	30	4	1993.70842	1993.70939	-96
2+4	RR(27,12)	28	13	1992.31087	1992.31208	-121	2+4	*R(33,15)	34	19	1993.74422	1993.74328	95
2+4	RR(23, 0)	24	1	1992.36602	1992.36578	24	2+4	RR(33,15)	34	16	1993.75403	1993.75407	-4
2+4	PR(19, 9)	20	8	1992.39613W	1992.39311	301	2+4	RR(34,24)	35	25	1993.76713	1993.76664	49
2+4	RR(28,15)	29	16	1992.39613	1992.39555	58	2+4	RR(28, 0)	29	1	1993.77296	1993.77230	66
2+4	RR(29,24)	30	25	1992.42838	1992.42832	6	2+4	RR(34,21)	35	22	1993.78795	1993.78793	2
2+4	RR(29,21)	30	22	1992.44639	1992.44620	19	225	RR(34,27)	35	28	1993.81081	1993.81199	-118
2+4	PR(22, 3)	23	2	1992.45665	1992.45742	-77	2+4	PR(24, 9)	25	8	1993.83923	1993.83867	56
225	RR(29,27)	30	28	1992.47614	1992.47710	-96	225	RR(33,33)	34	34	1993.83923	1993.83876	47
2+4	RR(29,18)	30	19	1992.52862	1992.52825	37	2+4	RR(34,18)	35	19	1993.87455	1993.87327	128
2+4	PR(18,12)	19	11	1992.52862	1992.52854	8	2+4	PR(27, 3)	28	2	1993.87455	1993.87624	-169
2+4	RR(27, 9)	28	10	1992.55546	1992.55433	114	225	RR(34,30)	35	31	1993.92363	1993.92411	-48
2+4	RR(26, 6)	27	7	1992.55546	1992.55736	-190	2+4	RR(32, 9)	33	10	1993.92363	1993.92465	-102
2+4	PR(21, 6)	22	5	1992.56382	1992.56296	85	2+4	RR(31, 6)	32	7	1993.93752	1993.93814	-63
2+4	RR(28,12)	29	13	1992.59072	1992.58899	173	2+4	*R(33,12)	34	16	1993.94649	1993.94621	28
2+4	RR(25, 3)	26	4	1992.59072	1992.59325	-253	2+4	RR(33,12)	34	13	1993.95711	1993.95701	10
2+4	RR(24, 0)	25	1	1992.64998	1992.65053	-55	2+4	PR(23,12)	24	11	1993.98351	1993.98300	51
2+4	*R(29,15)	30	19	1992.66035	1992.66036	-1	2+4	RR(30, 3)	31	4	1993.98351	1993.98414	-63
2+4	RR(29,15)	30	16	1992.67156	1992.67064	92	2+4	PR(26, 6)	27	5	1993.99088	1993.99103	-15
2+4	PR(20, 9)	21	8	1992.68566	1992.68559	7	2+4	*R(34,15)	35	19	1994.00869	1994.00941	-72
2+4	RR(30,24)	31	25	1992.69860	1992.69963	-102	2+4	RR(34,15)	35	16	1994.02125	1994.02073	52
2+4													

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	PR(28, 3)	29	2	1994.15404	1994.15493	-88				2+4	RR(36, 6)	37	7	1995.27461	1995.27587	-126			
225	RR(35, 30)	36	31	1994.18339	1994.18484	-146				2+4	*R(39, 15)	40	19	1995.31258	1995.31243	14			
2+4	RR(33, 9)	34	10	1994.19354	1994.19352	1				2+4	RR(40, 24)	41	25	1995.31258	1995.31261	-3			
2+4	RR(32, 6)	33	7	1994.21021	1994.20913	107				2+4	RR(39, 15)	40	16	1995.33056	1995.32873	183			
2+4	*R(34, 12)	35	16	1994.21021	1994.21213	-192				2+4	RR(35, 3)	36	4	1995.33056	1995.33218	-162			
2+4	RR(34, 12)	35	13	1994.22458	1994.22345	113				2+4	RR(40, 21)	41	22	1995.33907	1995.33868	39			
2+4	RR(31, 3)	32	4	1994.25622	1994.25718	-96				225	RR(40, 27)	41	28	1995.35223	1995.35314	-91			
2+4	PR(24, 12)	25	11	1994.27107	1994.26887	220				225	RR(38, 36)	39	37	1995.36685	1995.36395	290			
2+4	PR(27, 6)	28	5	1994.27107	1994.27158	-52				2+4	PR(31, 6)	32	5	1995.37799	1995.37689	110			
2+4	*R(35, 15)	36	19	1994.27107	1994.27370	-263				225	RR(39, 33)	40	34	1995.38248	1995.38218	30			
2+4	RR(35, 15)	36	16	1994.28760	1994.28570	190				2+4	PR(28, 12)	29	11	1995.39496	1995.39552	-57			
2+4	RR(36, 24)	37	25	1994.28760	1994.28923	-163				2+4	RR(34, 0)	35	1	1995.40287	1995.40324	-36			
2+4	RR(36, 21)	37	22	1994.31246	1994.31203	43				2+4	RR(40, 18)	41	19	1995.42927	1995.42874	53			
2+4	RR(30, 0)	31	1	1994.32269	1994.32285	-16				225	RR(40, 30)	41	31	1995.45893	1995.46060	-167			
225	RR(36, 27)	37	28	1994.33209	1994.33307	-97				2+4	RR(38, 9)	39	10	1995.51271	1995.51192	79			
225	RR(35, 33)	36	34	1994.36119	1994.36076	43				2+4	RR(39, 12)	40	13	1995.51271	1995.51399	-128			
2+4	RR(36, 18)	37	19	1994.39997	1994.39885	112				2+4	PR(33, 3)	34	2	1995.52329	1995.52292	37			
2+4	PR(26, 9)	27	8	1994.40615	1994.40512	102				2+4	RR(37, 6)	38	7	1995.53839	1995.53824	14			
2+4	PR(23, 15)	24	14	1994.43072W	1994.42737	335				2+4	PR(27, 15)	28	14	1995.56378	1995.56115	263			
2+4	PR(29, 3)	30	2	1994.43072	1994.43191	-119				2+4	RR(41, 24)	42	25	1995.56378	1995.56391	-13			
225	RR(36, 30)	37	31	1994.44226	1994.44371	-145				2+4	*R(40, 15)	41	19	1995.56378W	1995.56753	-375			
2+4	RR(34, 9)	35	10	1994.46067	1994.46066	1				2+4	RR(40, 15)	41	16	1995.58661	1995.58524	137			
2+4	*R(35, 12)	36	16	1994.47712	1994.47620	93				2+4	RR(41, 21)	42	22	1995.59218	1995.59086	132			
2+4	RR(33, 6)	34	7	1994.47712	1994.47840	-128				2+4	RR(36, 3)	37	4	1995.59736	1995.59665	71			
2+4	RR(35, 12)	36	13	1994.48868	1994.48820	48				225	RR(41, 27)	42	28	1995.60269	1995.60357	-87			
2+4	RR(32, 3)	33	4	1994.52745	1994.52850	-105				225	RR(39, 36)	40	37	1995.61846	1995.61580	266			
2+4	*R(36, 15)	37	19	1994.53623	1994.53614	9				225	RR(40, 33)	41	34	1995.63290	1995.63284	7			
2+4	RR(37, 24)	38	25	1994.54885	1994.54780	105				2+4	PR(32, 6)	33	5	1995.64869	1995.64899	-30			
2+4	RR(36, 15)	37	16	1994.54885	1994.54900	-15				2+4	RR(35, 0)	36	1	1995.66937	1995.66902	35			
2+4	PR(28, 6)	29	5	1994.54885	1994.55045	-160				2+4	PR(29, 12)	30	11	1995.66937W	1995.67299	-362			
2+4	RR(37, 21)	38	22	1994.57129	1994.57139	-10				2+4	RR(41, 18)	42	19	1995.68222	1995.68180	43			
225	RR(37, 27)	38	28	1994.59074	1994.59084	-10				225	RR(41, 30)	42	31	1995.70855	1995.71017	-162			
2+4	RR(31, 0)	32	1	1994.59581	1994.59553	28				2+4	RR(40, 12)	41	13	1995.76981	1995.76883	98			
225	RR(36, 33)	37	34	1994.61891	1994.61893	-2				2+4	RR(39, 9)	40	10	1995.76981	1995.77041	-60			
2+4	RR(37, 18)	38	19	1994.65976	1994.65898	78				2+4	PR(34, 3)	35	2	1995.79028	1995.79143	-115			
2+4	PR(27, 9)	28	8	1994.68605	1994.68582	23				2+4	PR(31, 9)	32	8	1995.79028	1995.79177	-149			
225	RR(37, 30)	38	31	1994.69982	1994.70073	-90				2+4	RR(38, 6)	39	7	1995.79889	1995.79890	0			
2+4	PR(30, 3)	31	2	1994.70728	1994.70721	7				2+4	RR(42, 24)	43	25	1995.81331	1995.81339	-8			
2+4	RR(35, 9)	36	10	1994.72582	1994.72607	-25				2+4	*R(41, 15)	42	19	1995.82096	1995.82079	18			
2+4	*R(36, 12)	37	16	1994.73907	1994.73841	66				2+4	RR(41, 15)	42	16	1995.84148	1995.84004	144			
2+4	RR(34, 6)	35	7	1994.74619	1994.74595	25				2+4	PR(28, 15)	29	14	1995.84148	1995.84040	107			
2+4	RR(36, 12)	37	13	1994.75242	1994.75127	115				2+4	RR(42, 21)	43	22	1995.84148	1995.84125	23			
2+4	*R(37, 15)	38	19	1994.79758	1994.79674	84				225	RR(42, 27)	43	28	1995.85155	1995.85216	-60			
2+4	RR(33, 3)	34	4	1994.79758	1994.79811	-53				2+4	RR(37, 3)	38	4	1995.85910	1995.85940	-31			
2+4	RR(38, 24)	39	25	1994.80477	1994.80455	22				225	RR(40, 36)	41	37	1995.86862	1995.86575	286			
2+4	RR(37, 15)	38	16	1994.81159	1994.81060	98				225	RR(41, 33)	42	34	1995.88123	1995.88161	-38			
2+4	PR(29, 6)	30	5	1994.82837	1994.82762	75				225	RR(39, 39)	40	40	1995.91474W	1995.90472	1002			
2+4	RR(38, 21)	39	22	1994.82837	1994.82895	-58				2+4	PR(33, 6)	34	5	1995.92036	1995.91940	96			
2+4	PR(26, 12)	27	11	1994.83626	1994.83555	70				2+4	RR(36, 0)	37	1	1995.93322	1995.93308	15			
225	RR(38, 27)	39	28	1994.84560	1994.84678	-118				2+4	RR(42, 18)	43	19	1995.93322	1995.93311	11			
225	RR(36, 36)	37	37	1994.85781W	1994.85455	326				2+4	PR(30, 12)	31	11	1995.94782	1995.94877	-96			
2+4	RR(32, 0)	33	1	1994.86605	1994.86649	-44				225	RR(42, 30)	43	31	1995.95673	1995.95789	-116			
225	RR(37, 33)	38	34	1994.87528	1994.87523	5				2+4	*R(41, 12)	42	16	1996.02280	1996.02183	97			
2+4	RR(38, 18)	39	19	1994.91773	1994.91733	40				2+4	RR(40, 9)	41	10	1996.02750	1996.02718	32			
225	RR(38, 30)	39	31	1994.95434	1994.95588	-154				2+4	RR(41, 12)	42	13	1996.04198	1996.04108	90			
2+4	PR(28, 9)	29	8	1994.96515	1994.96484	31				2+4	RR(39, 6)	40	7	1996.05860	1996.05783	77			
2+4	PR(31, 3)	32	2	1994.98022	1994.98081	-59				2+4	PR(35, 3)	36	2	1996.05860	1996.05825	35			
2+4	RR(36, 9)	37	10	1994.98956	1994.98975	-19				2+4	RR(43, 24)	44	25	1996.05860	1996.06107	-247			
2+4	PR(25, 15)	26	14	1994.99891	1994.99761	129				2+4	*R(42, 15)	43	19	1996.07238	1996.07222	15			
2+4	RR(35, 6)	36	7	1995.01172	1995.01177	-4				2+4	RR(43, 21)	44	22	1996.09090	1996.08984	106			
2+4	RR(37, 12)	38	13	1995.01172	1995.01264	-92				2+4	RR(42, 15)	43	16	1996.09090	1996.09312	-222			
2+4	*R(38, 15)	39	19	1995.05798	1995.05550	248				225	RR(43, 27)	44	28	1996.09657	1996.09891	-234			
2+4	RR(39, 24)	40	25	1995.05798	199														

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 *R(43,15)	44 19	1996.32260	1996.32182	78	2+4 PR(38, 6)	39 5	1997.24471	1997.24608	-136
2+4 PR(36, 3)	37 2	1996.32260	1996.32337	-77	2+4 *R(46,12)	47 16	1997.25982	1997.25931	52
2+4 PR(33, 9)	34 8	1996.33605	1996.33463	142	2+4 RR(48,24)	49 25	1997.27199	1997.27226	-27
2+4 RR(44,21)	45 22	1996.33605	1996.33664	-59	2+4 RR(45, 9)	46 10	1997.28588	1997.28512	75
225 RR(44,27)	45 28	1996.34372	1996.34382	-11	2+4 RR(46,12)	47 13	1997.28588	1997.28784	-196
2+4 RR(43,15)	44 16	1996.34372	1996.34447	-76	2+4 *R(47,15)	48 19	1997.30408	1997.30192	217
225 RR(42,36)	43 37	1996.36292	1996.35997	295	2+4 PR(35,12)	36 11	1997.30408	1997.30247	161
225 RR(43,33)	44 34	1996.37428	1996.37353	75	225 RR(48,27)	49 28	1997.30408	1997.30515	-107
2+4 RR(39, 3)	40 4	1996.37970	1996.37976	-6	2+4 RR(48,21)	49 22	1997.30408	1997.30599	-191
2+4 PR(30,15)	31 14	1996.39435	1996.39389	46	225 RR(46,36)	47 37	1997.32735	1997.32564	171
225 RR(41,39)	42 40	1996.41024W	1996.40147	877	2+4 RR(44, 6)	45 7	1997.32735	1997.32667	68
2+4 RR(44,18)	45 19	1996.43032	1996.43038	-6	2+4 RR(47,15)	48 16	1997.33417	1997.33259	158
225 RR(44,30)	45 31	1996.44652	1996.44775	-123	225 RR(47,33)	48 34	1997.33417	1997.33484	-67
2+4 PR(35, 6)	36 5	1996.45522	1996.45515	7	2+4 PR(40, 3)	41 2	1997.36643	1997.36690	-47
2+4 RR(38, 0)	39 1	1996.45522	1996.45601	-80	225 RR(45,39)	46 40	1997.38015W	1997.37201	814
2+4 PR(32,12)	33 11	1996.49473	1996.49530	-56	2+4 PR(32,18)	33 17	1997.40054	1997.39838	216
2+4 *R(43,12)	44 16	1996.52122	1996.52233	-112	2+4 RR(43, 3)	44 4	1997.40054	1997.39991	63
2+4 RR(42, 9)	43 10	1996.53558	1996.53550	8	2+4 PR(37, 9)	38 8	1997.40054	1997.40012	42
2+4 RR(43,12)	44 13	1996.54708	1996.54499	209	2+4 RR(48,18)	49 19	1997.40532	1997.40396	136
2+4 RR(45,24)	46 25	1996.55140	1996.55098	42	225 RR(48,30)	49 31	1997.40532	1997.40519	13
2+4 *R(44,15)	45 19	1996.56971	1996.56960	12	2+4 PR(34,15)	35 14	1997.48145	1997.48071	74
2+4 RR(41, 6)	42 7	1996.56971	1996.57053	-82	2+4 RR(42, 0)	43 1	1997.48145	1997.48117	28
2+4 RR(45,21)	46 22	1996.58440	1996.58166	274	2+4 PR(39, 6)	40 5	1997.50762	1997.50634	128
2+4 PR(37, 3)	38 2	1996.58440	1996.58680	-240	2+4 RR(49,24)	50 25	1997.50762	1997.50907	-146
225 RR(45,27)	46 28	1996.58440	1996.58691	-251	2+4 RR(46, 9)	47 10	1997.53150	1997.53154	-4
2+4 RR(44,15)	45 16	1996.59392	1996.59411	-18	2+4 RR(47,12)	48 13	1997.53150	1997.53196	-46
2+4 PR(34, 9)	35 8	1996.60485	1996.60353	132	225 RR(49,27)	50 28	1997.54217	1997.54091	126
225 RR(43,36)	44 37	1996.60485	1996.60423	62	2+4 *R(48,15)	49 19	1997.54217	1997.54235	-19
225 RR(44,33)	45 34	1996.61591	1996.61668	-77	2+4 RR(49,21)	50 22	1997.54217	1997.54387	-170
2+4 RR(40, 3)	41 4	1996.63691	1996.63737	-46	225 RR(47,36)	48 37	1997.56568W	1997.56232	336
225 RR(42,39)	43 40	1996.65549W	1996.64698	851	2+4 PR(36,12)	37 11	1997.56568	1997.56816	-249
2+4 PR(31,15)	32 14	1996.66758	1996.66811	-53	225 RR(48,33)	49 34	1997.57062	1997.57048	14
2+4 RR(45,18)	46 19	1996.67695	1996.67639	56	2+4 RR(48,15)	49 16	1997.57565	1997.57527	38
225 RR(45,30)	46 31	1996.68878	1996.68989	-111	2+4 RR(45, 6)	46 7	1997.57565	1997.57528	37
2+4 RR(39, 0)	40 1	1996.71542	1996.71489	53	2+4 PR(41, 3)	42 2	1997.62358	1997.62355	4
2+4 PR(36, 6)	37 5	1996.72116	1996.72048	68	225 RR(49,30)	50 31	1997.63975	1997.63992	-17
2+4 PR(33,12)	34 11	1996.76759	1996.76604	155	2+4 RR(49,18)	50 19	1997.64527	1997.64300	227
2+4 *R(44,12)	45 16	1996.76759	1996.76983	-224	2+4 RR(44, 3)	45 4	1997.65068	1997.65066	2
2+4 RR(43, 9)	44 10	1996.78813	1996.78712	101	2+4 PR(38, 9)	39 8	1997.66260	1997.66227	33
2+4 RR(46,24)	47 25	1996.79394	1996.79321	72	2+4 PR(33,18)	34 17	1997.67101	1997.66935	166
2+4 RR(44,12)	45 13	1996.79394	1996.79434	-40	2+4 RR(43, 0)	44 1	1997.73285	1997.73315	-29
2+4 *R(45,15)	46 19	1996.81443	1996.81554	-111	2+4 *R(48,12)	49 16	1997.74440	1997.74142	298
2+4 RR(42, 6)	43 7	1996.82521	1996.82430	91	2+4 RR(50,24)	51 25	1997.74440	1997.74408	32
2+4 RR(46,21)	47 22	1996.82521	1996.82489	32	2+4 PR(35,15)	36 14	1997.74440W	1997.74822	-382
225 RR(46,27)	47 28	1996.82521	1996.82815	-294	2+4 PR(40, 6)	41 5	1997.76465	1997.76490	-26
2+4 RR(45,15)	46 16	1996.84076	1996.84201	-124	2+4 RR(48,12)	49 13	1997.77500	1997.77434	66
225 RR(44,36)	45 37	1996.84873	1996.84660	214	225 RR(50,27)	51 28	1997.77500	1997.77483	17
2+4 PR(38, 3)	39 2	1996.84873	1996.84853	21	2+4 RR(47, 9)	48 10	1997.77500	1997.77625	-125
2+4 PR(30,18)	31 17	1996.84873	1996.85140	-267	2+4 RR(50,21)	51 22	1997.78174	1997.77996	178
225 RR(45,33)	46 34	1996.85772	1996.85794	-22	2+4 RR(49,15)	50 16	1997.78174	1997.78095	80
2+4 PR(35, 9)	36 8	1996.87068	1996.87075	-7	225 RR(48,36)	49 37	1997.79941	1997.79710	231
225 RR(43,39)	44 40	1996.89918W	1996.89057	861	225 RR(49,33)	50 34	1997.80502	1997.80424	77
2+4 RR(41, 3)	42 4	1996.89346	1996.89327	20	2+4 RR(46, 6)	47 7	1997.82062	1997.82217	-155
2+4 RR(46,18)	47 19	1996.92214	1996.92066	148	2+4 PR(37,12)	38 11	1997.83186	1997.83217	-31
225 RR(46,30)	47 31	1996.92876	1996.93018	-142	225 RR(50,30)	51 31	1997.87111	1997.87279	-168
2+4 PR(32,15)	33 14	1996.94073	1996.94066	8	2+4 PR(42, 3)	43 2	1997.87953	1997.87850	104
2+4 RR(40, 0)	41 1	1996.97155	1996.97205	-50	2+4 RR(50,18)	51 19	1997.87953	1997.88032	-79
2+4 PR(37, 6)	38 5	1996.98459	1996.98412	46	2+4 RR(45, 3)	46 4	1997.89917	1997.89970	-53
2+4 *R(45,12)	46 16	1997.01556	1997.01549	7	2+4 PR(39, 9)	40 8	1997.92294	1997.92273	21
2+4 RR(47,24)	48 25	1997.03487	1997.03364	123	2+4 PR(34,18)	35 17	1997.93912	1997.93865	47
2+4 PR(34,12)	35 11	1997.03487	1997.03510	-23	2+4 RR(51,24)	52 25	1997.97865	1997.97728	137
2+4 RR(44, 9)	45 10	1997.03487	1997.03698	-212	2+4 RR(49,12)	50 13	1997.97865	1997.97972	-107
2+4 RR(45,12)	46 13	1997.04389	1997.04196	193	2+4 RR(44, 0)	45 1	1997.98393	1997.98340	54
2+4 RR(47,21)	48 22	1997.06672	1997.06633	39	225 RR(51,27)	52 28	1998.00529	1998.00693	-164
225 RR(47,27)	48 28	1997.06672	1997.06757	-85	2+4 RR(51,21)	52 22	1998.01715	1998.01429	286
2+4 RR(43, 6)	44 7	1997.07598	1997.07635	-37	2+4 *R(50,15)	51 19	1998.01715	1998.01770	-55
225 RR(45,36)	46 37	1997.08904	1997.08707	198	2+4 RR(48, 9)	49 10	1998.01715	1998.01923	-208
2+4 RR(46,15)	47 16	1997.08904	1997.08817	87	225 RR(49,36)	50 37	1998.03329W	1998.02999	330
225 RR(46,33)	47 34	1997.09687	1997.09733	-46	225 RR(50,33)	51 34	1998.03329	1998.03613	-285
2+4 PR(39, 3)	40 2	1997.10757	1997.10856	-99	2+4 RR(50,15)	51 16	1998.05611	1998.05535	76
2+4 PR(31,18)	32 17	1997.12542	1997.12573	-30	2+4 RR(47, 6)	48 7	1998.06604	1998.06734	-130
225 RR(44,39)	45 40	1997.13695W	1997.13225	471	2+4 PR(38,12)	39 11	1998.09466	1998.09449	17
2+4 PR(36, 9)	37 8	1997.13695	1997.13628	68	225 RR(51,30)	52 31	1998.10291	1998.10382	-91
2+4 RR(42, 3)	43 4	1997.14723	1997.14745	-22	2+4 RR(51,18)	52 19	1998.11623	1998.11591	32
2+4 RR(47,18)	48 19	1997.16550	1997.16318	232	2+4 PR(43, 3)	44 2	1998.13095	1998.13175	-80
225 RR(47,30)	48 31	1997.16550W	1997.16861	-311	2+4 RR(46, 3)	47 4	1998.14660	1998.14703	-43
2+4 PR(33,15)	34 1	1997.21192	1997.21152	40	2+4 PR(40, 9)	41 8	1998.18185	1998.18151	34
2+4 RR(41, 0)	42 1	1997.22603	1997.22747	-144	2+4 RR(52,24)	53 25	1998.20879	1998.20868	11

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(I)					(II)					(III)					(IV)					(V)							
2+4	*R(50,12)	51	16	1998.21617	1998.21616	1	225	RR(54,36)	55	37	1999.16690	1999.16604	87	2+4	RR(45, 0)	46	1	1998.23244	1998.23192	52	225	RR(55,33)	56	34	1999.16690	1999.16752	-61
225	RR(52,27)	53	28	1998.23713	1998.23720	-7	2+4	RR(55,15)	56	16	1999.17428	1999.17371	57	2+4	RR(52,21)	53	22	1998.24848	1998.24683	164	2+4	RR(54,12)	55	13	1999.19252	1999.19136	115
2+4	*R(51,15)	52	19	1998.25395	1998.25261	135	2+4	PR(44, 9)	45	8	1999.20016	1999.19973	43	2+4	RR(50,12)	51	13	1998.25395	1998.25380	15	2+4	PR(44, 12)	45	8	1999.20016	1999.19973	43
2+4	RR(50,12)	51	13	1998.25395	1998.25380	15	2+4	RR(53, 9)	54	10	1999.20807	1999.20843	-36	2+4	RR(49, 9)	50	10	1998.26250	1998.26050	201	2+4	RR(53, 9)	54	10	1999.20807	1999.20843	-36
2+4	RR(49, 9)	50	10	1998.26250	1998.26050	201	2+4	RR(49, 0)	50	1	1999.20807	1999.20875	-68	225	RR(50,36)	51	37	1998.26250	1998.26098	152	2+4	RR(49, 0)	50	1	1999.20807	1999.20875	-68
225	RR(50,36)	51	37	1998.26250	1998.26098	152	225	RR(56,30)	57	31	1999.22840	1999.23123	-282	225	RR(51,33)	52	34	1998.26250W	1998.26615	-365	2+4	RR(56,30)	57	31	1999.22840	1999.23123	-282
2+4	PR(42, 6)	43	5	1998.27731	1998.27696	35	2+4	RR(52, 6)	53	7	1999.26857	1999.26745	113	2+4	PR(42, 6)	43	5	1998.27731	1998.27696	35	2+4	RR(52, 6)	53	7	1999.26857	1999.26745	113
2+4	PR(37,15)	38	14	1998.27731	1998.27820	-89	2+4	RR(56,18)	57	19	1999.26857	1999.26838	19	2+4	PR(37,15)	38	14	1998.27731	1998.27820	-89	2+4	RR(56,18)	57	19	1999.26857	1999.26838	19
2+4	RR(51,15)	52	16	1998.29446	1998.29274	172	2+4	PR(46, 6)	47	5	1999.27930	1999.28077	-147	2+4	RR(51,15)	52	16	1998.29446	1998.29274	172	2+4	PR(46, 6)	47	5	1999.27930	1999.28077	-147
2+4	RR(48, 6)	49	7	1998.31044	1998.31079	-35	2+4	PR(41,15)	42	14	1999.31813	1999.31799	14	2+4	RR(48, 6)	49	7	1998.31044	1998.31079	-35	2+4	PR(41,15)	42	14	1999.31813	1999.31799	14
225	RR(52,30)	53	31	1998.33145	1998.33299	-154	2+4	RR(57,24)	58	25	1999.33989	1999.33873	116	225	RR(52,30)	53	31	1998.33145	1998.33299	-154	2+4	RR(57,24)	58	25	1999.33989	1999.33873	116
2+4	RR(52,18)	53	19	1998.35207	1998.34979	228	2+4	RR(51, 3)	52	4	1999.35726	1999.35798	-72	2+4	RR(52,18)	53	19	1998.35207	1998.34979	228	2+4	RR(51, 3)	52	4	1999.35726	1999.35798	-72
2+4	PR(39,12)	40	11	1998.35207W	1998.35513	-306	225	RR(57,27)	58	28	1999.35726W	1999.36122	-396	2+4	PR(39,12)	40	11	1998.35207W	1998.35513	-306	225	RR(57,27)	58	28	1999.35726W	1999.36122	-396
2+4	PR(44, 3)	45	2	1998.38306	1998.38331	-25	2+4	PR(48, 3)	49	2	1999.37026	1999.37261	-235	2+4	PR(44, 3)	45	2	1998.38306	1998.38331	-25	2+4	PR(48, 3)	49	2	1999.37026	1999.37261	-235
2+4	RR(47, 3)	48	4	1998.39215	1998.39264	-49	2+4	PR(43,12)	44	11	1999.38207	1999.38085	122	2+4	RR(47, 3)	48	4	1998.39215	1998.39264	-49	2+4	PR(43,12)	44	11	1999.38207	1999.38085	122
2+4	PR(34,21)	35	20	1998.40743	1998.40748	-5	2+4	RR(57,21)	58	22	1999.38207	1999.38306	-99	2+4	PR(34,21)	35	20	1998.40743	1998.40748	-5	2+4	RR(57,21)	58	22	1999.38207	1999.38306	-99
2+4	RR(53,24)	54	25	1998.43857	1998.43829	29	225	RR(55,36)	56	37	1999.38855	1999.38757	98	2+4	RR(53,24)	54	25	1998.43857	1998.43829	29	225	RR(55,36)	56	37	1999.38855	1999.38757	98
2+4	PR(41, 9)	42	8	1998.43857	1998.43860	-3	2+4	RR(56,15)	57	16	1999.39869	1999.39933	-64	2+4	PR(41, 9)	42	8	1998.43857	1998.43860	-3	2+4	RR(56,15)	57	16	1999.39869	1999.39933	-64
2+4	*R(51,12)	52	16	1998.45215	1998.45075	141	2+4	PR(36,24)	37	23	1999.42152	1999.41990	162	2+4	*R(51,12)	52	16	1998.45215	1998.45075	141	2+4	PR(36,24)	37	23	1999.42152	1999.41990	162
225	RR(53,27)	54	28	1998.46473	1998.46565	-91	2+4	RR(55,12)	56	13	1999.42152	1999.42124	28	225	RR(53,27)	54	28	1998.46473	1998.46565	-91	2+4	RR(55,12)	56	13	1999.42152	1999.42124	28
2+4	RR(53,21)	54	22	1998.47743	1998.47761	-18	2+4	RR(54, 9)	55	10	1999.44132	1999.44114	17	2+4	RR(53,21)	54	22	1998.47743	1998.47761	-18	2+4	RR(54, 9)	55	10	1999.44132	1999.44114	17
2+4	RR(46, 0)	47	1	1998.47743	1998.47871	-128	2+4	RR(50, 0)	51	1	1999.44934	1999.44865	69	2+4	RR(46, 0)	47	1	1998.47743	1998.47871	-128	2+4	RR(50, 0)	51	1	1999.44934	1999.44865	69
225	RR(51,36)	52	37	1998.49240	1998.49008	232	2+4	PR(45, 9)	46	8	1999.44934	1999.45007	-73	225	RR(51,36)	52	37	1998.49240	1998.49008	232	2+4	PR(45, 9)	46	8	1999.44934	1999.45007	-73
2+4	RR(51,12)	52	13	1998.49240	1998.49088	152	225	RR(57,30)	58	31	1999.44934	1999.45118	-184	2+4	RR(51,12)	52	13	1998.49240	1998.49088	152	225	RR(57,30)	58	31	1999.44934	1999.45118	-184
225	RR(52,33)	53	34	1998.49240	1998.49430	-190	2+4	RR(53, 6)	54	7	1999.50308	1999.50232	75	225	RR(52,33)	53	34	1998.49240	1998.49430	-190	2+4	RR(53, 6)	54	7	1999.50308	1999.50232	75
2+4	RR(50, 9)	51	10	1998.50041	1998.50005	37	2+4	PR(40,18)	41	17	1999.51993	1999.51923	70	2+4	RR(50, 9)	51	10	1998.50041	1998.50005	37	2+4	PR(40,18)	41	17	1999.51993	1999.51923	70
2+4	PR(43, 6)	44	5	1998.52899	1998.53045	-147	2+4	PR(47, 6)	48	5	1999.52744	1999.52749	-5	2+4	PR(43, 6)	44	5	1998.52899	1998.53045	-147	2+4	PR(47, 6)	48	5	1999.52744	1999.52749	-5
2+4	PR(38,15)	39	14	1998.54043	1998.54067	-24	2+4	RR(58,24)	59	25	1999.56054	1999.55937	117	2+4	PR(38,15)	39	14	1998.54043	1998.54067	-24	2+4	RR(58,24)	59	25	1999.56054	1999.55937	117
2+4	RR(49, 6)	50	7	1998.55206	1998.55253	-47	2+4	PR(42,15)	43	14	1999.57347	1999.57374	-27	2+4	RR(49, 6)	50	7	1998.55206	1998.55253	-47	2+4	PR(42,15)	43	14	1999.57347	1999.57374	-27
225	RR(53,30)	54	31	1998.55982	1998.56032	-50	225	RR(58,27)	59	28	1999.58063	1999.58058	6	225	RR(53,30)	54	31	1998.55982	1998.56032	-50	225	RR(58,27)	59	28	1999.58063	1999.58058	6
2+4	RR(53,18)	54	19	1998.58472	1998.58197	275	2+4	RR(52, 3)	53	4	1999.59465	1999.59504	-39	2+4	RR(53,18)	54	19	1998.58472	1998.58197	275	2+4	RR(52, 3)	53	4	1999.59465	1999.59504	-39
2+4	PR(40,12)	41	11	1998.61438	1998.61409	29	2+4	RR(58,21)	59	22	1999.60620	1999.60503	116	2+4	PR(40,12)	41	11	1998.61438	1998.61409	29	2+4	RR(58,21)	59	22	1999.60620	1999.60503	116
2+4	PR(33,24)	34	23	1998.61438	1998.61652	-214	225	RR(57,33)	58	34	1999.60620	1999.60700	-80	2+4	PR(33,24)	34	23	1998.61438	1998.61652	-214	225	RR(57,33)	58	34	1999.60620	1999.60700	-80
2+4	PR(45, 3)	46	2	1998.63421	1998.63318	103	225	RR(56,36)	57	37	1999.60620	1999.60722	-103	2+4	PR(45, 3)	46	2	1998.63421	1998.63318	103	225	RR(56,36)	57	37	1999.60620	1999.60722	-103
2+4	RR(48, 3)	49	4	1998.63421	1998.63655	-234	2+4	PR(49, 3)	50	2	1999.61608	1999.61571	37	2+4	RR(48, 3)	49	4	1998.63421	1998.63655	-234	2+4	PR(49, 3)	50	2	1999.61608	1999.61571	37
2+4	RR(54,24)	55	25	1998.66665	1998.66609	56	2+4	PR(44,12)	45	11	1999.63322	1999.63306	15	2+4	RR(54,24)	55	25	1998.66665	1998.66609	56	2+4	PR(44,12)	45	11	1999.63322	1999.63306	15
2+4	*R(52,12)	53	16	1998.68307	1998.68348	-41	2+4	RR(56,12)	57	13	1999.64954	1999.64928	26	2+4	*R(52,12)	53	16	1998.68307	1998.68348	-41	2+4	RR(56,12)	57	13	1999.64954	1999.64928	26
225	RR(54,27)	55	28	1998.69203	1998.69227	-																					

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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	RR(56, 6)	57	7	2000.19668	2000.19669	-2		2+4	PR(47,21)	48	20	2001.75719	2001.75710	9					
2+4	PR(39,24)	40	23	2000.21007	2000.20823	184		2+4	RR(63, 6)	64	7	2001.75719	2001.75718	1					
2+4	PR(41,21)	42	20	2000.24741	2000.24633	108		2+4	PR(49,18)	50	17	2001.77699	2001.77677	23					
225	RR(59,36)	60	37	2000.25773	2000.25486	287		2+4	PR(51,15)	52	14	2001.80106	2001.79971	134					
2+4	PR(50, 6)	51	5	2000.25773	2000.25750	23		2+4	PR(53,12)	54	11	2001.82696	2001.82714	-19					
2+4	PR(43,18)	44	17	2000.28508	2000.28686	-179		2+4	RR(62, 3)	63	4	2001.86858W	2001.87183	-325					
2+4	RR(55, 3)	56	4	2000.29590	2000.29597	-7		2+4	RR(65, 9)	66	10	2001.89008	2001.88901	107					
2+4	RR(59,12)	60	13	2000.32027	2000.32227	-200		2+4	PR(59, 3)	60	2	2001.95314	2001.95370	-56					
2+4	PR(45,15)	46	14	2000.33139	2000.33087	52		2+4	RR(64, 6)	65	7	2001.97304	2001.97331	-27					
2+4	RR(58, 9)	59	10	2000.35544	2000.35496	47		2+4	RR(61, 0)	62	1	2001.97304	2001.97384	-80					
2+4	PR(47,12)	48	11	2000.38035	2000.37960	76		2+4	PR(46,24)	47	23	2001.98708	2001.98907	-199					
2+4	RR(54, 0)	55	1	2000.38940	2000.39100	-160		2+4	PR(48,21)	49	20	2002.00034	2002.00302	-268					
2+4	RR(57, 6)	58	7	2000.42513	2000.42473	40		2+4	PR(50,18)	51	17	2002.02061	2002.01920	140					
2+4	PR(49, 9)	50	8	2000.43515	2000.43451	64		2+4	PR(54,12)	55	11	2002.06110	2002.06250	-140					
2+4	PR(40,24)	41	23	2000.46809	2000.46766	42		2+4	RR(56, 9)	57	8	2002.09134	2002.09228	-94					
2+4	PR(51, 6)	52	5	2000.49813	2000.49745	67		2+4	RR(66, 9)	67	10	2002.12931	2002.12975	-44					
2+4	RR(56, 3)	57	4	2000.52482	2000.52620	-138		2+4	PR(58, 6)	59	5	2002.12931	2002.12979	-47					
2+4	PR(44,18)	45	17	2000.53950	2000.53938	12		2+4	PR(60, 3)	61	2	2002.17750	2002.17823	-73					
2+4	RR(60,12)	61	13	2000.53950W	2000.54283	-333		2+4	PR(47,24)	48	23	2002.23691	2002.23677	14					
2+4	PR(53, 3)	54	2	2000.56925	2000.57117	-191		2+4	PR(49,21)	50	20	2002.24553	2002.24726	-174					
2+4	RR(59, 9)	60	10	2000.58004	2000.57918	86		2+4	PR(51,18)	52	17	2002.25946	2002.25996	-50					
2+4	PR(46,15)	47	14	2000.58004	2000.57989	15		2+4	PR(53,15)	54	14	2002.27619	2002.27586	33					
2+4	RR(55, 0)	56	1	2000.62244	2000.62228	16		2+4	PR(57, 9)	58	8	2002.32247	2002.32235	12					
2+4	PR(48,12)	49	11	2000.62244	2000.62507	-263		2+4	PR(59, 6)	60	5	2002.35620	2002.35622	-2					
2+4	RR(58, 6)	59	7	2000.65060	2000.65106	-46		2+4	RR(66, 6)	67	7	2002.40007	2002.40049	-42					
2+4	PR(41,24)	42	23	2000.72482	2000.72542	-60		2+4	PR(61, 3)	62	2	2002.40007	2002.40107	-100					
2+4	RR(57, 3)	58	4	2000.75493	2000.75473	20		2+4	RR(63, 0)	64	1	2002.41324	2002.41063	261					
2+4	PR(43,21)	44	20	2000.75493	2000.75663	-169		2+4	PR(48,24)	49	23	2002.48415	2002.48280	135					
2+4	PR(45,18)	46	17	2000.79076	2000.79022	54		2+4	PR(50,21)	51	20	2002.49093	2002.48983	110					
2+4	RR(60, 9)	61	10	2000.80360	2000.80170	190		2+4	PR(54,15)	55	14	2002.51081	2002.51141	-60					
2+4	PR(54, 3)	55	2	2000.80360	2000.80581	-221		2+4	RR(68, 9)	69	10	2002.52028	2002.52125	-97					
2+4	PR(47,15)	48	14	2000.82798	2000.82722	76		2+4	PR(56,12)	57	11	2002.52899	2002.52816	83					
2+4	RR(56, 0)	57	1	2000.85226	2000.85184	42		2+4	PR(58, 9)	59	8	2002.55103	2002.55074	29					
2+4	PR(49,12)	50	11	2000.87124	2000.86886	238		2+4	PR(60, 6)	61	5	2002.58152	2002.58096	56					
2+4	PR(51, 9)	52	8	2000.91757	2000.91660	96		2+4	RR(67, 6)	68	7	2002.61255	2002.61155	100					
2+4	PR(53, 6)	54	5	2000.97213	2000.97229	-15		2+4	PR(62, 3)	63	2	2002.62230	2002.62224	6					
2+4	PR(42,24)	43	23	2000.98095	2000.98150	-55		2+4	RR(69, 9)	70	10	2002.72654	2002.72866	-211					
2+4	RR(58, 3)	59	4	2000.98095	2000.98155	-60		2+4	PR(51,21)	52	20	2002.73148	2002.73071	77					
2+4	PR(44,21)	45	20	2001.01011	2001.00926	85		2+4	PR(55,15)	56	14	2002.74304	2002.74527	-223					
2+4	RR(61, 9)	62	10	2001.02178	2001.02253	-74		2+4	PR(57,12)	58	11	2002.75817	2002.75846	-29					
2+4	PR(55, 3)	56	2	2001.03717	2001.03876	-159		2+4	PR(59, 9)	60	8	2002.77780	2002.77743	37					
2+4	PR(46,18)	47	17	2001.03717	2001.03938	-221		2+4	PR(61, 6)	62	5	2002.80513	2002.80402	110					
2+4	PR(48,15)	49	14	2001.07336	2001.07287	49		2+4	PR(63, 3)	64	2	2002.84018	2002.84172	-154					
2+4	RR(57, 0)	58	1	2001.07965	2001.07968	-2		2+4	PR(50,24)	51	23	2002.97075	2002.96982	93					
2+4	RR(60, 6)	61	7	2001.09902	2001.09861	41		2+4	PR(52,21)	53	20	2002.97075	2002.96992	84					
2+4	PR(50,12)	51	11	2001.11120	2001.11096	24		2+4	PR(54,18)	55	17	2002.97075	2002.97213	-137					
2+4	PR(52, 9)	53	8	2001.15353	2001.15512	-158		2+4	PR(58,12)	59	11	2002.98746	2002.98707	39					
2+4	RR(59, 3)	60	4	2001.20627	2001.20667	-41		2+4	PR(62, 6)	63	5	2003.02589	2003.02539	49					
2+4	PR(54, 6)	55	5	2001.20627	2001.20717	-90		2+4	RR(66, 0)	67	1	2003.05375	2003.05295	80					
2+4	RR(62, 9)	63	10	2001.24246	2001.24167	79		2+4	PR(55,18)	56	17	2003.20742	2003.20615	127					
2+4	PR(45,21)	46	20	2001.26099	2001.26022	78		2+4	PR(53,21)	54	20	2003.20742	2003.20744	-2					
2+4	PR(56, 3)	57	2	2001.27037	2001.27002	35		2+4	PR(57,15)	58	14	2003.20742	2003.20795	-52					
2+4	PR(49,15)	50	14	2001.31825	2001.31683	142		2+4	PR(59,12)	60	11	2003.21565	2003.21400	165					
2+4	RR(61, 6)	62	7	2001.31825	2001.31984	-158		2+4	PR(61, 9)	62	8	2003.22713	2003.22577	137					
2+4	PR(51,12)	52	11	2001.35106	2001.35137	-31		2+4	PR(63, 6)	64	5	2003.24475	2003.24508	-33					
2+4	PR(53, 9)	54	8	2001.39159	2001.39194	-35		2+4	PR(58,15)	59	14	2003.43879	2003.43676	203					
2+4	RR(60, 3)	61	4	2001.43028	2001.43009	19		2+4	PR(56,18)	57	17	2003.43879	2003.43850	29					
2+4	PR(55, 6)	56	5	2001.44025	2001.44036	-10		2+4	PR(60,12)	61	11	2003.43879	2003.43924	-46					
2+4	PR(44,24)	45	23	2001.48819	2001.48864	-45		2+4	RR(68, 0)	69	1	2003.47212	2003.47262	-50					
2+4	PR(57, 3)	58	2	2001.49950	2001.49960	-10		2+4	PR(61,12)	62	11	2003.66446	2003.66280	166					
2+4	PR(46,21)	47	20	2001.50613W	2001.50950	-336		2+4	PR(59,15)	60	14	2003.66446	2003.66388	57					
2+4	RR(59, 0)	60	1	2001.52883	2001.53020	-137		2+4	PR(63, 9)	64	8	2003.66882	2003.66735	146					
2+4	PR(48,18)	49	17	2001.53315	2001.53265	50		2+4	PR(57,18)	58	17	2003.66882	2003.66916	-34					
2+4	PR(50,15)	51	14	2001.55901	2001.55912	-11		2+4	PR(55,21)	56	20	2003.67845	2003.67745	100					
2+4	PR(52,12)	53	11	2001.59009	2001.59010	-1		2+4	PR(65, 6)	66	5	2003.67845	2003.67939	-94					
2+4	RR(61, 3)	62	4	2001.65165	2001.65181	-16		2+4	PR(62,12)	63	11	2003.88539	2003.88468	71					
2+4	PR(56, 6)	57	5	2001.67167	2001.67186	-19		2+4	PR(64, 9)	65	8	2003.88539	2003.88562	-23					
2+4	PR(58, 3)	59	2	2001.72532	2001.72750	-217		2+4	PR(66, 6)	67	5	2003.89374	2003.89402	-27					
2+4	PR(45,24)	46	23	2001.74005	2001.73969	36													

Table IV

Observed and Calculated Transition Wavenumbers in the $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$ Bands of $\text{F}^{37}\text{Cl}^{18}\text{O}_3$

(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 PP(71,15)	70 14	1935.10750	1935.10846	-96	2+4 PP(67,27)	66 26	1938.56498	1938.56442	56
2+4 RP(67, 0)	66 1	1935.14448	1935.14428	20	2+4 PP(63,15)	62 14	1938.57446	1938.57426	19
2+4 PP(69, 9)	68 8	1935.23247	1935.23291	-44	2+4 PP(68,30)	67 29	1938.59074	1938.59103	-29
2+4 PP(70,15)	69 14	1935.54505	1935.54701	-196	2+4 PP(62,12)	61 11	1938.61627	1938.61665	-37
2+4 RP(66, 0)	65 1	1935.58058	1935.58097	-39	2+4 PP(69,33)	68 32	1938.62626	1938.62617	9
2+4 PP(67, 6)	66 5	1935.76777	1935.76699	78	2+4 PP(70,36)	69 35	1938.66820	1938.66876	-55
2+4 PP(71,21)	70 20	1935.93652	1935.93761	-108	2+4 PP(61, 9)	60 8	1938.68167	1938.68104	63
2+4 PP(70,18)	69 17	1935.95331	1935.95309	21	2+4 PP(60, 6)	59 5	1938.77099	1938.77163	-64
2+4 PP(69,15)	68 14	1935.98386	1935.98405	-19	2+4 PP(59, 3)	58 2	1938.89458	1938.89420	38
2+4 PP(68,12)	67 11	1936.03304	1936.03326	-23	2+4 RP(57, 9)	56 10	1938.94280	1938.94169	111
2+4 PP(67, 9)	66 8	1936.10524	1936.10414	110	2+4 PP(65,24)	64 23	1938.97819	1938.97775	44
2+4 PP(66, 6)	65 5	1936.20139	1936.20084	55	2+4 PP(63,18)	62 17	1938.97819	1938.97801	19
2+4 PP(71,24)	70 23	1936.37494	1936.37447	47	2+4 PP(66,27)	65 26	1938.99736	1938.99581	155
2+4 PP(70,21)	69 20	1936.37494	1936.37553	-59	2+4 PP(62,15)	61 14	1938.99736W	1939.00061	-325
2+4 PP(69,18)	68 17	1936.38718	1936.38979	-262	2+4 RP(58, 0)	57 1	1939.01783	1939.01780	3
2+4 PP(68,15)	67 14	1936.41969	1936.41956	13	2+4 PP(61,12)	60 11	1939.04316	1939.04183	133
2+4 RP(64, 0)	63 1	1936.44799	1936.44963	-164	2+4 PP(68,33)	67 32	1939.06174	1939.06025	149
2+4 PP(67,12)	66 11	1936.46800	1936.46765	35	2+4 PP(69,36)	68 35	1939.10402	1939.10421	-18
2+4 PP(66, 9)	65 8	1936.53651	1936.53746	-95	2+4 PP(60, 9)	59 8	1939.10402	1939.10513	-111
2+4 PP(65, 6)	64 5	1936.63272	1936.63316	-44	2+4 PP(70,39)	69 38	1939.15741	1939.15470	271
2+4 PP(69,21)	68 20	1936.81273	1936.81193	80	2+4 PP(59, 6)	58 5	1939.19379	1939.19467	-89
2+4 PP(70,24)	69 23	1936.81273	1936.81214	59	2+4 PP(71,42)	70 41	1939.21250	1939.21097	153
2+4 PP(68,18)	67 17	1936.82554	1936.82497	58	225 RP(56,15)	55 16	1939.31514	1939.31449	65
2+4 PP(66,12)	65 11	1936.89965	1936.90052	-87	225 RP(56,12)	55 13	1939.31514	1939.31517	-4
2+4 PP(64, 6)	63 5	1937.06549	1937.06394	155	2+4 PP(58, 3)	57 2	1939.31514	1939.31618	-105
2+4 PP(68,21)	67 20	1937.24761	1937.24683	79	2+4 PP(63,21)	62 20	1939.39855	1939.39844	11
2+4 PP(69,24)	68 23	1937.24761	1937.24830	-68	2+4 PP(62,18)	61 17	1939.40380	1939.40403	-22
2+4 PP(71,30)	70 29	1937.28473	1937.28359	114	2+4 PP(64,24)	63 23	1939.40380	1939.40631	-251
2+4 PP(66,15)	65 14	1937.28473	1937.28603	-130	2+4 PP(61,15)	60 14	1939.42533	1939.42542	-9
2+4 PP(65,12)	64 11	1937.33119	1937.33185	-66	2+4 PP(65,27)	64 26	1939.42533	1939.42568	-35
2+4 PP(64, 9)	63 8	1937.39908	1937.39951	-43	2+4 RP(57, 0)	56 1	1939.44164	1939.44005	159
2+4 PP(63, 6)	62 5	1937.49377	1937.49318	59	2+4 PP(66,30)	65 29	1939.45276	1939.45496	-220
2+4 RP(61, 3)	60 4	1937.54932	1937.54899	33	2+4 PP(60,12)	59 11	1939.46575	1939.46548	27
2+4 PP(67,21)	66 20	1937.68199	1937.68020	179	2+4 PP(67,33)	66 32	1939.49408	1939.49282	126
2+4 PP(68,24)	67 23	1937.68199	1937.68294	-95	2+4 PP(59, 9)	58 8	1939.52651	1939.52767	-116
2+4 PP(69,27)	68 26	1937.69754	1937.69708	46	2+4 PP(68,36)	67 35	1939.53965	1939.53814	151
2+4 PP(65,15)	64 14	1937.71972	1937.71697	275	2+4 PP(69,39)	68 38	1939.59145	1939.59003	143
2+4 PP(70,30)	69 29	1937.71972	1937.72102	-131	2+4 RP(56, 3)	55 4	1939.66749	1939.66779	-30
2+4 RP(61, 0)	60 1	1937.74078	1937.74078	0	2+4 PP(57, 3)	56 2	1939.73785	1939.73661	124
2+4 PP(71,33)	70 32	1937.75174	1937.75347	-173	225 RP(55,12)	54 13	1939.73785	1939.73704	81
2+4 PP(64,12)	63 11	1937.76159	1937.76165	-6	225 RP(55,15)	54 16	1939.73785	1939.73753	32
2+4 PP(63, 9)	62 8	1937.82978	1937.82823	156	2+4 PP(62,21)	61 20	1939.82076W	1939.82418	-343
2+4 PP(62, 6)	61 5	1937.92085	1937.92088	-3	2+4 PP(61,18)	60 17	1939.82730	1939.82851	-122
2+4 RP(60, 3)	59 4	1937.97589	1937.97592	-3	2+4 PP(60,15)	59 14	1939.84909	1939.84869	40
225 RP(59,12)	58 13	1938.03998	1938.03981	17	2+4 PP(64,27)	63 26	1939.85491	1939.85403	88
2+4 RP(59, 9)	58 10	1938.09170	1938.09050	120	2+4 RP(56, 0)	55 1	1939.86097	1939.86088	9
2+4 PP(66,21)	65 20	1938.11257	1938.11205	52	2+4 PP(65,30)	64 29	1939.88570	1939.88465	105
2+4 PP(65,18)	64 17	1938.12198	1938.12137	60	2+4 PP(59,12)	58 11	1939.88570	1939.88758	-188
2+4 PP(68,27)	67 26	1938.13111	1938.13151	-40	2+4 PP(66,33)	65 32	1939.92405	1939.92386	19
2+4 PP(64,15)	63 14	1938.14649	1938.14638	10	2+4 PP(58, 9)	57 8	1939.94954	1939.94866	88
2+4 PP(69,30)	68 29	1938.15755	1938.15678	77	2+4 PP(67,36)	66 35	1939.96986	1939.97057	-70
2+4 RP(60, 0)	59 1	1938.16693	1938.16799	-106	2+4 PP(68,39)	67 38	1940.02587	1940.02383	203
2+4 PP(63,12)	62 11	1938.19035	1938.18992	43	2+4 PP(57, 6)	56 5	1940.03677	1940.03610	68
2+4 PP(70,33)	69 32	1938.19035	1938.19058	-23	2+4 PP(69,42)	68 41	1940.08509	1940.08289	220
2+4 PP(71,36)	70 35	1938.23256	1938.23180	76	2+4 RP(55, 3)	54 4	1940.08509	1940.08679	-169
2+4 PP(61, 6)	60 5	1938.34537	1938.34703	-165	2+4 PP(70,45)	69 44	1940.14562	1940.14709	-147
2+4 RP(59, 3)	58 4	1938.40079	1938.40127	-47	2+4 RP(54, 9)	53 10	1940.20704	1940.20586	118
2+4 PP(60, 3)	59 2	1938.47101	1938.47066	35	2+4 PP(71,48)	70 47	1940.21497	1940.21588	-92
2+4 RP(58, 9)	57 10	1938.51932	1938.51693	239	2+4 PP(61,21)	60 20	1940.24943	1940.24839	104
2+4 PP(65,21)	64 20	1938.54273	1938.54237	36	2+4 PP(60,18)	59 17	1940.24943	1940.25146	-203
2+4 PP(66,24)	65 23	1938.54924	1938.54767	157	2+4 PP(62,24)	61 23	1940.25866	1940.25884	-19
2+4 PP(64,18)	63 17	1938.54924	1938.55045	-121	2+4 PP(59,15)	58 14	1940.26973	1940.27042	-69

(I) The band type (2+4 and 225 correspond to $\nu_2 + \nu_4^{\pm 1}$ and $2\nu_2 + \nu_5^{\pm 1}$, respectively), the branch, (J lower and K lower) are reported.(II) J upper and K upper(III) Observed wavenumbers (in cm^{-1}).(IV) Calculated wavenumbers (in cm^{-1}).(V) Observed – Calculated values (in 10^5 cm^{-1}).

Observed wavenumbers identified by a W in column (III) have not been included in the fit.

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(I)		(II)		(III)	(IV)	(V)	(I)		(II)	(III)	(IV)	(V)
2+4 RP(55, 0)	54	1	1940.28033	1940.28009	24		2+4 RP(51, 0)	50	1	1941.94179	1941.94085	95
2+4 PP(63, 27)	62	26	1940.28033	1940.28086	-53		2+4 PP(55, 15)	54	14	1941.94179	1941.94187	-8
2+4 PP(58, 12)	57	11	1940.30884	1940.30814	70		2+4 PP(58, 24)	57	23	1941.94179W	1941.94553	-374
2+4 PP(64, 30)	63	29	1940.31368	1940.31282	86		225 RP(29, 9)	28	10	1941.95297	1941.95176	121
2+4 RP(54, 6)	53	7	1940.34060	1940.34008	52		2+4 PP(67, 48)	66	47	1941.95297	1941.95292	5
2+4 PP(65, 33)	64	32	1940.35375	1940.35339	36		2+4 PP(59, 27)	58	26	1941.97404	1941.97287	118
2+4 PP(57, 9)	56	8	1940.36965	1940.36809	156		2+4 PP(54, 12)	53	11	1941.97404	1941.97484	-79
2+4 PP(66, 36)	65	35	1940.40228	1940.40147	81		2+4 PP(60, 30)	59	29	1942.01154	1942.01023	131
225 RP(33, 9)	32	10	1940.42721	1940.42816	-95		2+4 PP(53, 9)	52	8	1942.03086	1942.03024	62
2+4 PP(56, 6)	55	5	1940.45556	1940.45447	109		2+4 PP(68, 51)	67	50	1942.03086	1942.03154	-67
2+4 PP(67, 39)	66	38	1940.45556	1940.45613	-57		2+4 PP(61, 33)	60	32	1942.05589	1942.05628	-40
2+4 RP(54, 3)	53	4	1940.50292	1940.50418	-126		2+4 PP(62, 36)	61	35	1942.11122	1942.10990	132
2+4 PP(68, 42)	67	41	1940.51626	1940.51659	-33		2+4 PP(52, 6)	51	5	1942.11122	1942.11228	-106
2+4 PP(55, 3)	54	2	1940.57264	1940.57278	-14		2+4 PP(69, 54)	68	53	1942.11122	1942.11390	-268
225 RP(53, 15)	52	16	1940.58016	1940.57860	156		2+4 RP(50, 3)	49	4	1942.15830	1942.15770	60
2+4 PP(69, 45)	68	44	1940.58016	1940.58220	-204		2+4 PP(63, 39)	62	38	1942.17120	1942.17014	106
2+4 PP(70, 48)	69	47	1940.65039	1940.65240	-201		2+4 PP(51, 3)	50	2	1942.22554	1942.22627	-73
2+4 PP(60, 21)	59	20	1940.67131	1940.67107	24		2+4 PP(64, 42)	63	41	1942.23853	1942.23623	230
2+4 PP(59, 18)	58	17	1940.67131	1940.67287	-156		225 RP(49, 15)	48	16	1942.23853	1942.24061	-209
2+4 PP(61, 24)	60	23	1940.68286	1940.68282	4		2+4 RP(49, 9)	48	10	1942.27731	1942.27898	-167
2+4 PP(58, 15)	57	14	1940.68926	1940.69060	-134		2+4 PP(71, 60)	70	59	1942.28775	1942.28856	-81
2+4 RP(54, 0)	53	1	1940.69790	1940.69770	20		2+4 RP(49, 9)	48	10	1942.29577	1942.29505	72
2+4 PP(62, 27)	61	26	1940.70558	1940.70615	-57		225 RP(28, 6)	27	7	1942.30487	1942.30340	147
2+4 PP(71, 51)	70	50	1940.72452	1940.72673	-221		2+4 PP(65, 45)	64	44	1942.30487	1942.30750	-263
2+4 PP(57, 12)	56	11	1940.72452	1940.72714	-262		2+4 PP(55, 18)	54	17	1942.34408	1942.34309	99
2+4 PP(63, 30)	62	29	1940.74031	1940.73946	85		2+4 PP(56, 21)	55	20	1942.34408	1942.34639	-231
2+4 PP(64, 33)	63	32	1940.78426	1940.78140	286		2+4 RP(50, 0)	49	1	1942.35364	1942.35199	165
2+4 PP(56, 9)	55	8	1940.78426	1940.78597	-171		2+4 PP(54, 15)	53	14	1942.35364	1942.35586	-221
225 RP(32, 9)	31	10	1940.81240	1940.81166	74		2+4 PP(57, 24)	56	23	1942.36345	1942.36337	8
2+4 PP(65, 36)	64	35	1940.83142	1940.83086	57		2+4 PP(66, 48)	65	47	1942.38106	1942.38340	-234
2+4 PP(55, 6)	54	5	1940.87120	1940.87127	-7		2+4 PP(53, 12)	52	11	1942.38954	1942.38762	192
2+4 PP(66, 39)	65	38	1940.88642	1940.88691	-49		2+4 RP(49, 6)	48	7	1942.38954	1942.39124	-170
2+4 RP(53, 3)	52	4	1940.92019	1940.91997	22		2+4 PP(58, 27)	57	26	1942.38954	1942.39204	-250
2+4 PP(67, 42)	66	41	1940.95286W	1940.94877	409		2+4 RP(49, 6)	48	7	1942.40670	1942.40730	-60
2+4 PP(54, 3)	53	2	1940.98823	1940.98851	-29		2+4 PP(59, 30)	58	29	1942.43080	1942.43076	4
2+4 PP(68, 45)	67	44	1941.01288	1941.01579	-291		2+4 PP(52, 9)	51	8	1942.44315	1942.44187	129
2+4 PP(69, 48)	68	47	1941.08873	1941.08742	131		2+4 PP(67, 51)	66	50	1942.46391	1942.46345	46
2+4 PP(59, 21)	58	20	1941.09243	1941.09221	22		2+4 PP(60, 33)	59	32	1942.47792	1942.47819	-27
2+4 PP(58, 18)	57	17	1941.09243	1941.09274	-32		2+4 PP(51, 6)	50	5	1942.52345	1942.52280	65
2+4 PP(60, 24)	59	23	1941.10555	1941.10526	29		2+4 PP(61, 36)	60	35	1942.53299	1942.53320	-21
2+4 PP(57, 15)	56	14	1941.10555W	1941.10924	-369		2+4 PP(68, 54)	67	53	1942.54796	1942.54726	70
2+4 RP(53, 0)	52	1	1941.11297	1941.11370	-73		2+4 RP(49, 3)	48	4	1942.56770	1942.56706	64
2+4 PP(61, 27)	60	26	1941.12837	1941.12992	-155		2+4 PP(62, 39)	61	38	1942.59461	1942.59484	-23
2+4 PP(56, 12)	55	11	1941.14470	1941.14460	10		2+4 PP(50, 3)	49	2	1942.63526	1942.63570	-44
2+4 PP(70, 51)	69	50	1941.16460	1941.16317	142		225 RP(48, 12)	47	13	1942.64417	1942.64400	17
2+4 PP(62, 30)	61	29	1941.16460	1941.16458	2		2+4 PP(63, 42)	62	41	1942.66325	1942.66234	90
2+4 RP(52, 6)	51	7	1941.17284	1941.17178	107		2+4 RP(27, 12)	26	13	1942.68513	1942.68477	37
225 RP(31, 9)	30	10	1941.19384	1941.19343	41		225 RP(27, 9)	26	10	1942.70463	1942.70313	150
2+4 PP(55, 9)	54	8	1941.20052	1941.20229	-177		2+4 RP(48, 9)	47	10	1942.70463	1942.70352	111
2+4 PP(63, 33)	62	32	1941.20910	1941.20789	121		2+4 PP(70, 60)	69	59	1942.72281	1942.72483	-202
2+4 PP(64, 36)	63	35	1941.26025	1941.25873	152		2+4 PP(64, 45)	63	44	1942.73268	1942.73504	-236
2+4 PP(54, 6)	53	5	1941.28627	1941.28651	-24		2+4 PP(54, 18)	53	17	1942.75675	1942.75677	-2
2+4 PP(65, 39)	64	38	1941.31919W	1941.31617	301		2+4 PP(55, 21)	54	20	1942.76346	1942.76136	210
2+4 RP(52, 3)	51	4	1941.33271	1941.33416	-144		2+4 RP(49, 0)	48	1	1942.76346	1942.76152	194
2+4 PP(66, 42)	65	41	1941.38288W	1941.37944	344		2+4 PP(53, 15)	52	14	1942.76850	1942.76829	21
2+4 PP(53, 3)	52	2	1941.40254	1941.40267	-13		2+4 PP(56, 24)	55	23	1942.77978	1942.77966	12
225 RP(51, 15)	50	16	1941.41274	1941.41297	-24		2+4 PP(52, 12)	51	11	1942.79847	1942.79884	-37
2+4 PP(67, 45)	66	44	1941.44367W	1941.44787	-421		2+4 PP(57, 27)	56	26	1942.81133	1942.80967	166
2+4 PP(57, 18)	56	17	1941.51149	1941.51107	42		2+4 PP(65, 48)	64	47	1942.81133	1942.81237	-104
2+4 PP(58, 21)	57	20	1941.51149	1941.51181	-32		2+4 PP(58, 30)	57	29	1942.85078	1942.84976	102
2+4 PP(59, 24)	58	23	1941.52516	1941.52616	-101		2+4 PP(51, 9)	50	8	1942.85078	1942.85192	-115
2+4 PP(56, 15)	55	14	1941.52516	1941.52633	-117		2+4 PP(59, 33)	58	32	1942.89930	1942.89857	73
2+4 PP(60, 27)	59	26	1941.55107	1941.55216	-109		2+4 PP(50, 6)	49	5	1942.93298	1942.93174	124
2+4 PP(55, 12)	54	11	1941.55970	1941.56050	-80		2+4 PP(60, 36)	59	35	1942.95488	1942.95497	-9
2+4 RP(51, 6)	50	7	1941.56717	1941.56674	43		2+4 RP(48, 3)	47	4	1942.97528	1942.97479	48
225 RP(30, 9)	29	10	1941.57306	1941.57346	-40		2+4 PP(67, 54)	66	53	1942.97988	1942.97911	77
2+4 PP(61, 30)	60	29	1941.58844	1941.58817	27		2+4 PP(61, 39)	60	38	1943.01630	1943.01802	-172
2+4 PP(69, 51)	68	50	1941.59894	1941.59811	83		2+4 PP(49, 3)	48	2	1943.04043W	1943.04354	-311
2+4 PP(54, 9)	53	8	1941.61681	1941.61705	-24		225 RP(26, 6)	25	7	1943.05290	1943.05220	71
2+4 PP(62, 33)	61	32	1941.63325	1941.63285	40		225 RP(47, 12)	46	13	1943.05290	1943.05264	26
2+4 PP(63, 36)	62	35	1941.68575	1941.68507	68		225 RP(47, 15)	46	16	1943.06310	1943.06150	160
2+4 PP(53, 6)	52	5	1941.69855	1941.70018	-163		2+4 PP(62, 42)	61	41	1943.08927	1943.08694	233
2+4 PP(64, 39)	63	38	1941.74497	1941.74392	105		2+4 RP(47, 9)	46	10	1943.09486	1943.09628	-142
2+4 RP(51, 3)	50	4	1941.74497	1941.74674	-177		2+4 RP(47, 9)	46	10	1943.11150	1943.11040	110
2+4 PP(65, 42)	64	41	1941.81121	1941.80859	262		2+4 PP(69, 60)	68	59	1943.15835	1943.15959	-124
2+4 PP(66, 45)	65	44	1941.87811	1941.87844	-33		2+4 PP(63, 45)	62	44	1943.15835	1943.16106	-271
2+4 PP(56, 18)	55	17	1941.92853	1941.92785	68		2+4 PP(53, 18)	52	17	1943.16830	1943.16890	-60
2+4 PP(57, 21)	56	20	1941.92853	1941.92987	-134		2+4 RP(48, 0)	47	1	1943.16830	1943.16941	-111

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)		
2+4 PP(54,21)	53	20	1943.17586	1943.17479	107	2+4 PP(54,30)	53	29	1944.51148	1944.51039	109
2+4 PP(52,15)	51	14	1943.18069	1943.17917	152	2+4 PP(61,48)	60	47	1944.51148	1944.51308	-159
2+4 PP(55,24)	54	23	1943.19500	1943.19441	59	225 RP(22, 9)	21	10	1944.55178	1944.55107	70
2+4 PP(51,12)	50	11	1943.20876	1943.20850	26	225 PP(22, 9)	21	8	1944.55178	1944.55107	70
2+4 RP(47, 6)	46	7	1943.20876	1943.20888	-12	2+4 PP(46, 6)	45	5	1944.55178	1944.55169	9
2+4 PP(56,27)	55	26	1943.22538	1943.22577	-39	2+4 PP(67,63)	66	62	1944.55178	1944.55393	-216
2+4 PP(64,48)	63	47	1943.23840	1943.23982	-142	2+4 PP(55,33)	54	32	1944.56530	1944.56476	55
2+4 PP(57,30)	56	29	1943.26672	1943.26723	-50	2+4 RP(44, 3)	43	4	1944.58891	1944.58949	-58
2+4 PP(58,33)	57	32	1943.31975	1943.31742	233	2+4 PP(62,51)	61	50	1944.60034	1944.60034	-1
2+4 PP(65,51)	64	50	1943.31975W	1943.32275	-301	2+4 PP(56,36)	55	35	1944.62641	1944.62677	-36
2+4 PP(49, 6)	48	5	1943.34021	1943.33910	111	2+4 PP(45, 3)	44	2	1944.65965	1944.65902	63
2+4 PP(59,36)	58	35	1943.37597	1943.37522	75	225 RP(43,12)	42	13	1944.67013	1944.67045	-31
2+4 PP(66,54)	65	53	1943.40973	1943.40945	28	225 RP(43,15)	42	16	1944.68133	1944.68290	-157
225 RP(25, 6)	24	7	1943.42208	1943.42396	-188	2+4 PP(63,54)	62	53	1944.69402	1944.69140	262
2+4 PP(60,39)	59	38	1943.43873	1943.43968	-95	2+4 PP(57,39)	56	38	1944.69402	1944.69547	-145
225 RP(25, 9)	24	10	1943.44965	1943.44753	211	2+4 RP(43, 9)	42	10	1944.72086	1944.72203	-117
2+4 PP(48, 3)	47	2	1943.44965	1943.44980	-15	2+4 PP(58,42)	57	41	1944.77076	1944.77008	67
225 RP(46,12)	45	13	1943.45845	1943.45961	-116	2+4 RP(44, 0)	43	1	1944.78532	1944.78470	62
225 RP(46,15)	45	16	1943.46853	1943.46940	-87	2+4 PP(64,57)	63	56	1944.78532	1944.78591	-59
2+4 PP(61,42)	60	41	1943.51000	1943.51001	-2	2+4 PP(49,18)	48	17	1944.80219	1944.80189	31
2+4 PP(62,45)	61	44	1943.58552	1943.58556	-4	2+4 PP(48,15)	47	14	1944.80790	1944.80705	85
2+4 PP(53,21)	52	20	1943.58552	1943.58667	-115	2+4 PP(50,21)	49	20	1944.81319	1944.81300	19
2+4 PP(51,15)	50	14	1943.58552	1943.58848	-296	2+4 PP(47,12)	46	11	1944.83037	1944.83144	-107
2+4 PP(54,24)	53	23	1943.60638	1943.60762	-124	225 RP(21, 3)	20	4	1944.83037	1944.83223	-187
2+4 RP(46, 6)	45	7	1943.61592	1943.61511	81	2+4 PP(51,24)	50	23	1944.83819	1944.83795	23
2+4 PP(50,12)	49	11	1943.61592	1943.61659	-67	2+4 PP(52,27)	51	26	1944.87427	1944.87474	-47
2+4 PP(55,27)	54	26	1943.64062	1943.64033	29	2+4 PP(65,60)	64	59	1944.88210	1944.88357	-147
2+4 PP(63,48)	62	47	1943.66620	1943.66576	44	225 RP(21, 6)	20	7	1944.89268	1944.89341	-73
2+4 PP(49, 9)	48	8	1943.66620	1943.66732	-112	2+4 RP(21,12)	20	13	1944.89268	1944.89455	-187
2+4 PP(56,30)	55	29	1943.68389	1943.68315	74	2+4 PP(53,30)	52	29	1944.92194	1944.92170	24
2+4 PP(69,63)	68	62	1943.68968	1943.68900	68	2+4 PP(60,48)	59	47	1944.93429	1944.93445	-16
2+4 PP(57,33)	56	32	1943.73167W	1943.73473	-306	2+4 PP(45, 6)	44	5	1944.95256	1944.95270	-15
2+4 PP(48, 6)	47	5	1943.74345	1943.74489	-144	2+4 PP(54,33)	53	32	1944.97691	1944.97746	-55
2+4 PP(64,51)	63	50	1943.75127	1943.75013	114	2+4 PP(66,63)	65	62	1944.98534	1944.98414	119
2+4 RP(46, 3)	45	4	1943.78629	1943.78539	90	2+4 PP(61,51)	60	50	1945.02349	1945.02317	32
2+4 PP(58,36)	57	35	1943.79448	1943.79393	55	2+4 PP(55,36)	54	35	1945.04126	1945.04088	38
225 RP(24, 6)	23	7	1943.79448	1943.79396	51	2+4 PP(44, 3)	43	2	1945.05848	1945.05890	-42
2+4 PP(65,54)	64	53	1943.83564	1943.83828	-265	225 RP(42,12)	41	13	1945.07097	1945.07069	27
2+4 PP(47, 3)	46	2	1943.85463	1943.85447	16	2+4 PP(67,66)	66	65	1945.08767	1945.08743	24
2+4 PP(59,39)	58	38	1943.86109	1943.85980	129	2+4 PP(56,39)	55	38	1945.11370	1945.11101	268
2+4 PP(60,42)	59	41	1943.93244	1943.93156	88	2+4 PP(62,54)	61	53	1945.11370	1945.11569	-199
2+4 RP(46, 0)	45	1	1943.97932	1943.98032	-100	225 RP(42,18)	41	19	1945.15882	1945.15925	-42
2+4 PP(51,18)	50	17	1943.98860	1943.98851	9	2+4 RP(43, 0)	42	1	1945.18748W	1945.18443	304
2+4 PP(50,15)	49	14	1943.99663	1943.99624	40	2+4 PP(57,42)	56	41	1945.18748	1945.18705	43
2+4 PP(52,21)	51	20	1943.99663	1943.99700	-36	2+4 PP(48,18)	47	17	1945.20826	1945.20623	203
2+4 PP(53,24)	52	23	1944.02096	1944.01928	169	2+4 PP(47,15)	46	14	1945.20826	1945.21011	-185
2+4 RP(45, 6)	44	7	1944.02096	1944.01960	136	2+4 PP(63,57)	62	56	1945.20826W	1945.21166	-340
2+4 PP(49,12)	48	11	1944.02096	1944.02311	-215	2+4 PP(49,21)	48	20	1945.21862	1945.21866	-4
2+4 PP(67,60)	66	59	1944.02096W	1944.02459	-363	2+4 PP(46,12)	45	11	1945.23229	1945.23324	-96
2+4 PP(54,27)	53	26	1944.05140	1944.05334	-194	2+4 RP(42, 6)	41	7	1945.23229	1945.23434	-206
2+4 PP(48, 9)	47	8	1944.07218	1944.07265	-47	2+4 PP(50,24)	49	23	1945.24518	1945.24497	21
2+4 PP(62,48)	61	47	1944.09139	1944.09018	122	2+4 PP(58,45)	57	44	1945.26713	1945.26834	-121
2+4 PP(55,30)	54	29	1944.09753	1944.09754	-1	2+4 PP(45, 9)	44	8	1945.28106	1945.27918	188
2+4 PP(68,63)	67	62	1944.12115	1944.12222	-107	2+4 PP(51,27)	50	26	1945.28106	1945.28312	-206
2+4 PP(47, 6)	46	5	1944.14948	1944.14908	40	2+4 PP(64,60)	63	59	1945.31166	1945.31079	87
2+4 PP(56,33)	55	32	1944.14948	1944.15051	-103	2+4 PP(52,30)	51	29	1945.33231	1945.33147	85
225 RP(23, 6)	22	7	1944.16256	1944.16221	35	2+4 PP(44, 6)	43	5	1945.35325	1945.35213	113
2+4 PP(63,51)	62	50	1944.17549	1944.17600	-50	2+4 PP(59,48)	58	47	1945.35325	1945.35431	-105
2+4 RP(45, 3)	44	4	1944.18850	1944.18826	24	2+4 RP(42, 3)	41	4	1945.38726	1945.38706	20
2+4 PP(57,36)	56	35	1944.21122	1944.21112	11	2+4 PP(53,33)	52	32	1945.38726	1945.38863	-137
2+4 PP(69,66)	68	65	1944.22151	1944.22254	-103	2+4 PP(65,63)	64	62	1945.41045	1945.41284	-240
2+4 PP(46, 3)	45	2	1944.25596	1944.25754	-158	2+4 PP(60,51)	59	50	1945.44413	1945.44448	-35
2+4 PP(64,54)	63	53	1944.26615	1944.26560	55	2+4 PP(54,36)	53	35	1945.45435	1945.45346	88
225 RP(44,12)	43	13	1944.26615	1944.26851	-236	2+4 PP(43, 3)	42	2	1945.45435	1945.45718	-283
2+4 PP(58,39)	57	38	1944.27708	1944.27840	-132	225 RP(41,12)	40	13	1945.46866	1945.46925	-59
2+4 PP(59,42)	58	41	1944.35383	1944.35159	224	2+4 PP(66,66)	65	65	1945.51770	1945.51761	8
225 RP(44,18)	43	19	1944.35383	1944.35370	13	2+4 RP(41, 9)	40	10	1945.51770	1945.51830	-60
2+4 PP(65,57)	64	56	1944.35849	1944.35864	-15	2+4 PP(55,39)	54	38	1945.52587	1945.52501	85
2+4 RP(45, 0)	44	1	1944.38331	1944.38333	-2	2+4 PP(61,54)	60	53	1945.53842	1945.53845	-4
2+4 PP(50,18)	49	17	1944.39605	1944.39598	7	225 RP(19, 3)	18	4	1945.55585	1945.55701	-116
2+4 PP(49,15)	48	14	1944.40358	1944.40243	116	2+4 RP(42, 0)	41	1	1945.58381	1945.58253	129
2+4 PP(51,21)	50	20	1944.40358	1944.40578	-219	2+4 PP(47,18)	46	17	1945.60729	1945.60902	-172
2+4 PP(48,12)	47	11	1944.42710	1944.42806	-96	2+4 PP(46,15)	45	14	1945.60729W	1945.61160	-430
2+4 PP(52,24)	51	23	1944.42710	1944.42939	-229	2+4 RP(41, 6)	40	7	1945.62029	1945.62019	10
2+4 PP(60,45)	59	44	1944.42710	1944.43000	-290	2+4 PP(48,21)	47	20	1945.62029	1945.62277	-248
2+4 PP(66,60)	65	59	1944.45511	1944.45484	27	2+4 PP(45,12)	44	11	1945.63643	1945.63347	296
2+4 PP(53,27)	52	26	1944.46488	1944.46481	7	2+4 PP(62,57)	61	56	1945.63643	1945.63589	54
2+4 PP(47, 9)	46	8	1944.47649	1944.47641	8	2+4 PP(49,24)	48	23	1945.65020	1945.65043	-23

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2+4	PP(44, 9)	43	8	1945.67872	1945.67819	53	2+4	PP(45,21)	44	20	1946.82456	1946.82574	-117
2+4	PP(50,27)	49	26	1945.69142	1945.68995	146	2+4	PP(53,42)	52	41	1946.83997	1946.83960	37
2+4	PP(63,60)	62	59	1945.73807	1945.73650	157	2+4	PP(46,24)	45	23	1946.85708	1946.85747	-39
2+4	PP(51,30)	50	29	1945.73807	1945.73969	-162	2+4	PP(41, 9)	40	8	1946.86521	1946.86567	-47
2+4	PP(43, 6)	42	5	1945.75015	1945.74996	20	2+4	PP(59,57)	58	56	1946.90031	1946.89949	83
2+4	PP(58,48)	57	47	1945.77285	1945.77263	22	2+4	PP(47,27)	46	26	1946.90031	1946.90114	-83
2+4	RP(41, 3)	40	4	1945.78385	1945.78338	47	2+4	PP(54,45)	53	44	1946.92989W	1946.92667	322
2+4	PP(52,33)	51	32	1945.79752	1945.79826	-74	2+4	PP(40, 6)	39	5	1946.93478	1946.93385	92
2+4	PP(64,63)	63	62	1945.83868	1945.84003	-136	2+4	PP(48,30)	47	29	1946.95458	1946.95507	-49
2+4	PP(42, 3)	41	2	1945.85418	1945.85385	33	2+4	RP(38, 3)	37	4	1946.96298	1946.96252	47
2+4	PP(59,51)	58	50	1945.86474	1945.86426	47	225	RP(15, 3)	14	4	1946.98429	1946.98520	-90
2+4	PP(53,36)	52	35	1945.86474	1945.86450	23	2+4	PP(60,60)	59	59	1947.00504	1947.00453	51
225	RP(40,12)	39	13	1945.86474	1945.86612	-138	2+4	PP(49,33)	48	32	1947.01827	1947.01787	41
2+4	RP(40, 9)	39	10	1945.91500	1945.91403	97	2+4	PP(55,48)	54	47	1947.01827	1947.01845	-18
225	RP(18, 3)	17	4	1945.91500	1945.91673	-173	2+4	PP(39, 3)	38	2	1947.03398	1947.03423	-26
2+4	PP(54,39)	53	38	1945.93748	1945.93748	0	225	RP(15, 6)	14	7	1947.04455	1947.04468	-13
2+4	PP(60,54)	59	53	1945.96039	1945.95970	68	225	RP(37,12)	36	13	1947.04455	1947.04654	-199
225	RP(18, 6)	17	7	1945.97811	1945.97699	112	2+4	PP(50,36)	49	35	1947.08867	1947.08839	28
2+4	RP(41, 0)	40	1	1945.97811	1945.97897	-87	2+4	RP(37, 9)	36	10	1947.08867	1947.09151	-284
2+4	PP(46,18)	45	17	1946.01046	1946.01023	23	2+4	PP(56,51)	55	50	1947.11502	1947.11447	55
2+4	PP(45,15)	44	14	1946.01046	1946.01151	-105	225	RP(37,18)	36	19	1947.14018	1947.14277	-259
2+4	RP(40, 6)	39	7	1946.01748	1946.01599	148	2+4	RP(38, 0)	37	1	1947.15888	1947.15844	44
2+4	PP(55,42)	54	41	1946.01748	1946.01639	108	2+4	PP(51,39)	50	38	1947.16635	1947.16567	68
2+4	PP(47,21)	46	20	1946.02574	1946.02532	42	2+4	PP(42,15)	41	14	1947.20308	1947.20181	127
2+4	PP(44,12)	43	11	1946.03224	1946.03212	12	2+4	PP(43,18)	42	17	1947.20308	1947.20448	-140
2+4	PP(48,24)	47	23	1946.05627	1946.05433	194	2+4	PP(57,54)	56	53	1947.21540	1947.21431	109
2+4	PP(61,57)	60	56	1946.05627	1946.05861	-234	2+4	PP(41,12)	40	11	1947.21540W	1947.21857	-317
2+4	PP(43, 9)	42	8	1946.07592	1946.07560	31	2+4	PP(44,21)	43	20	1947.22390	1947.22359	31
2+4	PP(49,27)	48	26	1946.09423	1946.09523	-100	2+4	PP(52,42)	51	41	1947.24993	1947.24890	103
2+4	PP(56,45)	55	44	1946.10209	1946.10057	152	2+4	PP(45,24)	44	23	1947.25677	1947.25670	7
2+4	PP(42, 6)	41	5	1946.14620	1946.14619	1	2+4	PP(40, 9)	39	8	1947.25677	1947.25832	-155
2+4	PP(50,30)	49	29	1946.14620	1946.14636	-17	2+4	PP(46,27)	45	26	1947.30154	1947.30176	-22
2+4	PP(62,60)	61	59	1946.16220	1946.16069	151	2+4	PP(58,57)	57	56	1947.31882	1947.31764	118
2+4	RP(40, 3)	39	4	1946.17951	1946.17807	143	2+4	PP(39, 6)	38	5	1947.32520	1947.32528	-8
2+4	PP(57,48)	56	47	1946.18916	1946.18944	-27	2+4	PP(53,45)	52	44	1947.33802	1947.33743	60
2+4	PP(51,33)	50	32	1946.20714	1946.20634	80	225	RP(14, 3)	13	4	1947.33802	1947.33778	24
2+4	PP(41, 3)	40	2	1946.24854	1946.24892	-38	2+4	RP(37, 3)	36	4	1947.35202	1947.35227	-25
2+4	PP(63,63)	62	62	1946.26422	1946.26571	-149	2+4	PP(47,30)	46	29	1947.35642	1947.35709	-68
2+4	PP(52,36)	51	35	1946.27435	1946.27401	34	225	RP(14, 6)	13	7	1947.39681	1947.39704	-23
225	RP(17, 3)	16	4	1946.27435	1946.27467	-32	2+4	PP(48,33)	47	32	1947.42172	1947.42131	41
225	RP(39,15)	38	16	1946.27435	1946.27699	-264	2+4	PP(38, 3)	37	2	1947.42172	1947.42447	-275
2+4	PP(58,51)	57	50	1946.28195	1946.28252	-58	2+4	PP(54,48)	53	47	1947.43145	1947.43067	78
2+4	RP(39, 9)	38	10	1946.30727	1946.30815	-89	2+4	RP(36, 9)	35	10	1947.48044	1947.48073	-28
2+4	PP(53,39)	52	38	1946.34880	1946.34842	39	2+4	PP(49,36)	48	35	1947.49388	1947.49326	62
2+4	RP(40, 0)	39	1	1946.37629	1946.37378	251	225	PP(12, 9)	11	8	1947.51260	1947.51393	-133
2+4	PP(59,54)	58	53	1946.37629W	1946.37943	-314	2+4	PP(55,51)	54	50	1947.52708	1947.52815	-106
2+4	PP(44,15)	43	14	1946.40979	1946.40986	-7	2+4	RP(37, 0)	36	1	1947.54612	1947.54830	-218
2+4	PP(45,18)	44	17	1946.40979	1946.40989	-10	2+4	PP(50,39)	49	38	1947.57262	1947.57198	65
2+4	RP(39, 6)	38	7	1946.40979	1946.41006	-28	2+4	PP(41,15)	40	14	1947.59686	1947.59542	144
2+4	PP(46,21)	45	20	1946.42715	1946.42631	83	2+4	PP(42,18)	41	17	1947.59686	1947.59942	-255
2+4	PP(54,42)	53	41	1946.42715	1946.42877	-162	2+4	PP(40,12)	39	11	1947.61095	1947.61088	7
2+4	PP(43,12)	42	11	1946.42715	1946.42919	-204	2+4	PP(43,21)	42	20	1947.61942	1947.61989	-46
2+4	PP(47,24)	46	23	1946.45624	1946.45668	-44	2+4	PP(56,54)	55	53	1947.62975	1947.62946	29
2+4	PP(42, 9)	41	8	1946.47004	1946.47143	-140	2+4	PP(39, 9)	38	8	1947.64977	1947.64937	40
2+4	PP(60,57)	59	56	1946.48036	1946.47981	55	2+4	PP(44,24)	43	23	1947.65551	1947.65437	114
2+4	PP(48,27)	47	26	1946.49858	1946.49896	-38	2+4	PP(51,42)	50	41	1947.65551	1947.65666	-116
2+4	PP(55,45)	54	44	1946.51791W	1946.51439	353	225	RP(13, 3)	12	4	1947.68607	1947.68858	-251
2+4	PP(41, 6)	40	5	1946.54103	1946.54082	21	2+4	PP(45,27)	44	26	1947.70127	1947.70082	45
2+4	PP(49,30)	48	29	1946.55160	1946.55149	11	2+4	PP(38, 6)	37	5	1947.71527	1947.71510	16
2+4	RP(39, 3)	38	4	1946.57076	1946.57112	-36	2+4	PP(57,57)	56	56	1947.73541	1947.73427	114
2+4	PP(61,60)	60	59	1946.58325	1946.58337	-12	2+4	PP(52,45)	51	44	1947.74791	1947.74664	127
2+4	PP(56,48)	55	47	1946.60386	1946.60471	-85	225	RP(13, 6)	12	7	1947.74791	1947.74763	28
2+4	PP(50,33)	49	32	1946.61290	1946.61288	2	2+4	PP(46,30)	45	29	1947.75761	1947.75756	4
225	RP(16, 3)	15	4	1946.63119	1946.63082	36	2+4	PP(37, 3)	36	2	1947.81220	1947.81309	-89
2+4	PP(40, 3)	39	2	1946.64223	1946.64238	-15	2+4	PP(47,33)	46	32	1947.82279	1947.82320	-41
225	RP(38,12)	37	13	1946.65244	1946.65476	-233	225	RP(35,12)	34	13	1947.82279	1947.82498	-219
225	RP(38,15)	37	16	1946.67182	1946.67122	60	2+4	PP(53,48)	52	47	1947.84130	1947.84135	-5
2+4	PP(51,36)	50	35	1946.68155	1946.68197	-42	225	RP(35,15)	34	16	1947.84130	1947.84358	-229
225	RP(16, 6)	15	7	1946.68991	1946.69055	-65	225	PP(11, 9)	10	8	1947.85993	1947.86169	-176
2+4	PP(57,51)	56	50	1946.69921	1946.69926	-5	2+4	PP(48,36)	47	35	1947.89688	1947.89659	30
2+4	RP(38, 9)	37	10	1946.69921	1946.74								

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
225 RP(12, 3)	11 4	1948.03990	1948.03760	230	2+4 PP(44,36)	43 35	1949.49500	1949.49440	60
2+4 PP(38, 9)	37 8	1948.03990	1948.03882	108	2+4 PP(36,15)	35 14	1949.53901	1949.53972	-71
2+4 PP(55,54)	54 53	1949.04447W	1948.04309	100139	2+4 PP(35,12)	34 11	1949.54937	1949.54857	80
2+4 PP(43,24)	42 23	1948.05051	1948.05047	4	2+4 PP(37,18)	36 17	1949.54937	1949.55045	-108
2+4 PP(50,42)	49 41	1948.06291	1948.06289	2	2+4 PP(38,21)	37 20	1949.57899	1949.57778	121
2+4 PP(44,27)	43 26	1948.09925	1948.09832	93	2+4 PP(45,39)	44 38	1949.57899	1949.58036	-137
2+4 PP(37, 6)	36 5	1948.10441	1948.10332	110	2+4 PP(34, 9)	33 8	1949.57899	1949.58060	-160
2+4 RP(35, 3)	34 4	1948.12627	1948.12682	-55	2+4 PP(39,24)	38 23	1949.61940	1949.61922	18
2+4 PP(51,45)	50 44	1948.15531	1948.15432	98	2+4 PP(33, 6)	32 5	1949.63850	1949.64004	-155
2+4 PP(45,30)	44 29	1948.15531	1948.15648	-117	2+4 RP(31, 3)	30 4	1949.65598	1949.65605	-8
2+4 PP(36, 3)	35 2	1948.20035	1948.20009	27	2+4 PP(46,42)	45 41	1949.67297	1949.67234	64
2+4 PP(46,33)	45 32	1948.22309	1948.22355	-45	2+4 PP(40,27)	39 26	1949.67297	1949.67271	26
2+4 PP(52,48)	51 47	1948.25055	1948.25049	6	2+4 PP(32, 3)	31 2	1949.73150	1949.73186	-36
2+4 PP(47,36)	46 35	1948.29883	1948.29837	46	2+4 PP(41,30)	40 29	1949.73689	1949.73656	33
2+4 RP(35, 0)	34 1	1948.32264	1948.32304	-40	225 RP(30,12)	29 13	1949.74483W	1949.74116	366
2+4 PP(53,51)	52 50	1948.35194	1948.35091	103	2+4 PP(47,45)	46 44	1949.76901	1949.76963	-62
2+4 PP(39,15)	38 14	1948.37955	1948.37790	165	2+4 PP(42,33)	41 32	1949.80883	1949.80937	-54
2+4 PP(48,39)	47 38	1948.37955	1948.37997	-42	2+4 RP(31, 0)	30 1	1949.85358	1949.85261	96
2+4 PP(40,18)	39 17	1948.38530	1948.38457	74	2+4 PP(48,48)	47 47	1949.87270	1949.87169	101
225 RP(11, 3)	10 4	1948.38530	1948.38483	48	2+4 RP(30, 6)	29 7	1949.87870	1949.87972	-102
2+4 PP(38,12)	37 11	1948.39028	1948.39074	-46	2+4 PP(43,36)	42 35	1949.89026	1949.88997	29
2+4 PP(41,21)	40 20	1948.40787	1948.40776	11	2+4 PP(35,15)	34 14	1949.92481	1949.92381	99
2+4 PP(37, 9)	36 8	1948.42604	1948.42667	-63	2+4 PP(34,12)	33 11	1949.93179	1949.93132	47
2+4 PP(42,24)	41 23	1948.44410	1948.44501	-91	2+4 PP(36,18)	35 17	1949.93666	1949.93592	74
2+4 PP(54,54)	53 53	1948.45560	1948.45518	42	2+4 RQ(48,18)	48 19	1949.93666	1949.93597	69
2+4 PP(49,42)	48 41	1948.46669	1948.46756	-87	2+4 RQ(49,15)	49 16	1949.94705	1949.94538	167
2+4 PP(36, 6)	35 5	1948.49248	1948.48992	257	2+4 PP(33, 9)	32 8	1949.96271	1949.96203	68
2+4 PP(43,27)	42 26	1948.49248	1948.49427	-178	2+4 PP(37,21)	36 20	1949.96271	1949.96464	-192
2+4 RP(34, 3)	33 4	1948.51286	1948.51162	124	2+4 PP(44,39)	43 38	1949.97794	1949.97739	55
225 PP(9, 9)	8 8	1948.55099	1948.55171	-72	2+4 PP(38,24)	37 23	1950.00559	1950.00748	-189
2+4 PP(44,30)	43 29	1948.55099	1948.55384	-285	2+4 RQ(47,18)	47 19	1950.01914	1950.01841	73
2+4 PP(50,45)	49 44	1948.56180	1948.56046	133	2+4 PP(32, 6)	31 5	1950.01914	1950.02019	-105
2+4 PP(35, 3)	34 2	1948.58526	1948.58547	-21	2+4 RP(30, 3)	29 4	1950.03374	1950.03421	-47
2+4 PP(45,33)	44 32	1948.62064	1948.62234	-170	2+4 PP(39,27)	38 26	1950.06281	1950.06239	42
2+4 RP(33, 9)	32 10	1948.64057	1948.63842	215	2+4 PP(45,42)	44 41	1950.06971	1950.07083	-112
2+4 PP(51,48)	50 47	1948.65752	1948.65810	-58	2+4 RQ(48,12)	48 13	1950.07944	1950.07940	4
2+4 PP(46,36)	45 35	1948.69844	1948.69860	-15	2+4 RQ(46,18)	46 19	1950.10014	1950.09913	100
2+4 RP(34, 0)	33 1	1948.70882	1948.70793	90	2+4 PP(31, 3)	30 2	1950.11263	1950.11073	190
225 RP(10, 3)	9 4	1948.73190	1948.73026	163	2+4 RQ(47,15)	47 16	1950.11263	1950.11362	-99
2+4 RP(33, 6)	32 7	1948.73901	1948.73847	54	2+4 PP(40,30)	39 29	1950.12734	1950.12768	-34
2+4 PP(52,51)	51 50	1948.76042	1948.75999	43	2+4 PP(46,45)	45 44	1950.16916	1950.16960	-44
2+4 PP(38,15)	37 14	1948.76728	1948.76676	52	2+4 RQ(45,18)	45 19	1950.17862	1950.17812	49
2+4 PP(39,18)	38 17	1948.77676	1948.77478	198	2+4 PP(41,33)	40 32	1950.20094	1950.20193	-100
2+4 PP(37,12)	36 11	1948.77676	1948.77828	-152	2+4 RP(30, 0)	29 1	1950.23081	1950.23084	-3
2+4 PP(47,39)	46 38	1948.78326	1948.78165	161	2+4 RQ(46,12)	46 13	1950.24579	1950.24578	1
2+4 PP(40,21)	39 20	1948.79930	1948.79934	-4	2+4 RQ(44,18)	44 19	1950.25582	1950.25539	43
2+4 PP(36, 9)	35 8	1948.81320	1948.81292	28	2+4 RP(29, 6)	28 7	1950.25582	1950.25675	-93
2+4 PP(41,24)	40 23	1948.83722	1948.83798	-77	2+4 RQ(45,15)	45 16	1950.27657	1950.27489	168
2+4 PP(48,42)	47 41	1948.87206	1948.87070	135	2+4 PP(42,36)	41 35	1950.28441	1950.28399	42
2+4 PP(35, 6)	34 5	1948.87206	1948.87491	-285	2+4 PP(34,15)	33 14	1950.30707	1950.30632	75
2+4 PP(42,27)	41 26	1948.88697	1948.88864	-167	2+4 PP(33,12)	32 11	1950.31335	1950.31247	88
2+4 RP(33, 3)	32 4	1948.89576	1948.89476	100	2+4 PP(35,18)	34 17	1950.31948	1950.31980	-32
2+4 PP(43,30)	42 29	1948.94892	1948.94964	-72	2+4 RQ(43,18)	43 19	1950.33069	1950.33093	-24
2+4 PP(49,45)	48 44	1948.96648	1948.96506	142	225 RQ(45, 9)	45 10	1950.33069	1950.33291	-222
2+4 PP(34, 3)	33 2	1948.96648	1948.96923	-274	2+4 PP(32, 9)	31 8	1950.34186	1950.34185	0
2+4 PP(44,33)	43 32	1949.01846	1949.01957	-111	2+4 PP(36,21)	35 20	1950.35085	1950.34991	94
2+4 PP(50,48)	49 47	1949.06463	1949.06417	46	2+4 RQ(44,15)	44 16	1950.35085	1950.35291	-206
225 RP(9, 3)	8 4	1949.07445	1949.07391	54	2+4 PP(43,39)	42 38	1950.37276	1950.37287	-11
2+4 PP(45,36)	44 35	1949.09739	1949.09727	11	2+4 PP(37,24)	36 23	1950.39340	1950.39417	-77
2+4 RP(32, 6)	31 7	1949.12012	1949.12058	-45	2+4 PP(31, 6)	30 5	1950.40218W	1950.39871	347
2+4 PP(37,15)	36 14	1949.15328	1949.15403	-76	2+4 RQ(42,18)	42 19	1950.40218	1950.40474	-256
2+4 PP(38,18)	37 17	1949.16423	1949.16341	82	225 RQ(44, 9)	44 10	1950.41435	1950.41248	187
2+4 PP(36,12)	35 11	1949.16423	1949.16422	0	2+4 RQ(43,15)	43 16	1950.42968	1950.42919	49
2+4 PP(51,51)	50 50	1949.16882	1949.16754	128	2+4 PP(38,27)	37 26	1950.44977	1950.45051	-74
2+4 PP(46,39)	45 38	1949.18182	1949.18178	4	2+4 PP(44,42)	43 41	1950.46842	1950.46778	65
2+4 PP(39,21)	38 20	1949.18880	1949.18935	-55	2+4 RQ(41,18)	41 19	1950.47798	1950.47683	114
2+4 PP(35, 9)	34 8	1949.19765	1949.19756	9	2+4 RQ(43,12)	43 13	1950.48431	1950.48217	213
2+4 PP(40,24)	39 23	1949.22932	1949.22939	-7	2+4 RQ(42,15)	42 16	1950.50311	1950.50373	-61
2+4 PP(34, 6)	33 5	1949.25821	1949.25828	-8	2+4 PP(39,30)	38 29	1950.51685	1950.51723	-38
2+4 PP(47,42)	46 41	1949.27303	1949.27229	74	225 RP(28,15)	27 16	1950.51685	1950.51851	-166
2+4 PP(41,27)	40 26	1949.28050	1949.28146	-96	2+4 RP(28, 9)	27 10	1950.53680	1950.53432	248
2+4 PP(42,30)	41 29	1949.34466	1949.34388	77	2+4 RQ(40,18)	40 19	1950.54598	1950.54720	-122
2+4 PP(33, 3)	32 2	1949.35067	1949.35136	-69	2+4 RQ(42,12)	42 13	1950.55793	1950.55746	47
2+4 PP(48,45)	47 44	1949.36791	1949.36812	-21	225 RQ(42, 9)	42 10	1950.56781	1950.56630	150
225 RP(31,15)	30 16	1949.37924W	1949.38253	-329	2+4 PP(45,45)	44 44	1950.56781	1950.56802	-22
2+4 RP(31, 9)	30 10	1949.40217	1949.40184	33	2+4 RQ(41,15)	41 16	1950.57740	1950.57653	87
2+4 PP(43,33)	42 32	1949.41528	1949.41525	3	2+4 PP(40,33)	39 32	1950.59286	1950.59293	-8
2+4 PP(49,48)	48 47	1949.46825	1949.46870	-45	2+4 RQ(39,18)	39 19	1950.61528	1950.61585	-57

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2+4 RQ(41,12)	41	13	1950.63167	1950.63099	69		2+4 PP(38,33)	37	32	1951.36886	1951.37025	-138
2+4 RP(28, 6)	27	7	1950.63167	1950.63208	-41		2+4 RQ(29,12)	29	13	1951.37735	1951.37654	81
225 RQ(41, 9)	41	10	1950.64284	1950.64056	228		2+4 RP(26, 6)	25	7	1951.37735	1951.37768	-33
2+4 RQ(40,15)	40	16	1950.64884	1950.64759	125		225 RQ(29, 9)	29	10	1951.39456	1951.39355	101
2+4 PP(41,36)	40	35	1950.67708	1950.67645	64		2+4 RQ(25,18)	25	19	1951.39456	1951.39637	-181
2+4 RQ(38,18)	38	19	1950.68379	1950.68278	102		2+4 RQ(27,15)	27	16	1951.41464	1951.41334	130
2+4 PP(33,15)	32	14	1950.68848	1950.68723	125		225 RQ(28, 6)	28	7	1951.41913	1951.41951	-38
2+4 PP(32,12)	31	11	1950.68848W	1950.69202	-354		2+4 RQ(28,12)	28	13	1951.42707	1951.42728	-21
2+4 PP(34,18)	33	17	1950.70241	1950.70209	32		2+4 RQ(24,18)	24	19	1951.44007	1951.43924	83
2+4 RQ(40,12)	40	13	1950.70241	1950.70276	-35		2+4 PP(31,15)	30	14	1951.44478	1951.44426	52
225 RQ(40, 9)	40	10	1950.71091	1950.71304	-213		225 RQ(28, 9)	28	10	1951.44478	1951.44480	-3
2+4 RQ(39,15)	39	16	1950.71816	1950.71691	125		2+4 PP(30,12)	29	11	1951.44478	1951.44630	-153
2+4 PP(31, 9)	30	8	1950.71816	1950.72006	-190		2+4 PP(39,36)	38	35	1951.45821	1951.45668	152
2+4 PP(35,21)	34	20	1950.73307	1950.73360	-53		2+4 RQ(26,15)	26	16	1951.45821	1951.46011	-190
2+4 RQ(37,18)	37	19	1950.74808	1950.74798	10		2+4 PP(32,18)	31	17	1951.45821W	1951.46191	-370
225 RQ(39, 6)	39	7	1950.75484	1950.75217	267		2+4 PP(29, 9)	28	8	1951.47104	1951.47164	-60
2+4 PP(42,39)	41	38	1950.76644	1950.76680	-35		2+4 PP(33,21)	32	20	1951.49551	1951.49624	-73
2+4 PP(30, 6)	29	5	1950.77488	1950.77561	-73		2+4 RQ(25,15)	25	16	1951.50372	1951.50513	-141
2+4 PP(36,24)	35	23	1950.78087	1950.77928	159		2+4 RQ(26,12)	26	13	1951.52223	1951.52350	-127
2+4 RQ(38,15)	38	16	1950.78534	1950.78450	84		2+4 PP(28, 6)	27	5	1951.52223	1951.52453	-230
2+4 RP(28, 3)	27	4	1950.78534	1950.78552	-19		2+4 RP(26, 3)	25	4	1951.53162	1951.53016	146
2+4 RQ(36,18)	36	19	1950.81273	1950.81146	126		2+4 PP(34,24)	33	23	1951.54631	1951.54477	154
2+4 PP(37,27)	36	26	1950.83788	1950.83705	83		2+4 RQ(24,15)	24	16	1951.54631	1951.54843	-212
2+4 RQ(37,15)	37	16	1950.85179	1950.85035	145		2+4 PP(40,39)	39	38	1951.54631W	1951.54997	-367
225 RQ(38, 9)	38	10	1950.85179	1950.85270	-90		2+4 RQ(21,18)	21	19	1951.55886	1951.55756	130
2+4 PP(43,42)	42	41	1950.86356	1950.86317	39		225 RQ(25, 6)	25	7	1951.56406	1951.56403	3
2+4 PP(29, 3)	28	2	1950.86356	1950.86359	-2		2+4 RQ(25,12)	25	13	1951.56965	1951.56899	66
225 RP(27,12)	26	13	1950.87234	1950.87027	208		225 RQ(25, 9)	25	10	1951.58871	1951.58794	77
2+4 RQ(35,18)	35	19	1950.87234	1950.87323	-88		2+4 RQ(23,15)	23	16	1951.58871	1951.58999	-127
225 RP(27,15)	26	16	1950.89183	1950.89368	-186		2+4 PP(35,27)	34	26	1951.60719	1951.60542	177
2+4 PP(38,30)	37	29	1950.90538	1950.90522	16		225 RQ(24, 6)	24	7	1951.60719	1951.60863	-144
2+4 RQ(37,12)	37	13	1950.90538	1950.90756	-218		2+4 PP(27, 3)	26	2	1951.60719	1951.60989	-270
2+4 RQ(36,15)	36	16	1950.91537	1950.91446	91		2+4 RQ(22,15)	22	16	1951.63039	1951.62981	57
2+4 RQ(34,18)	34	19	1950.93323	1950.93327	-4		225 RQ(24, 9)	24	10	1951.63039	1951.63211	-173
225 RQ(36, 6)	36	7	1950.95561	1950.95560	1		225 RQ(23, 6)	23	7	1951.65356	1951.65145	211
2+4 RQ(36,12)	36	13	1950.97301	1950.97232	70		2+4 RP(25, 9)	24	10	1951.65356	1951.65152	204
2+4 RP(28, 0)	27	1	1950.98171	1950.98230	-59		2+4 RQ(23,12)	23	13	1951.65356	1951.65470	-115
2+4 PP(39,33)	38	32	1950.98171	1950.98237	-66		2+4 RQ(21,15)	21	16	1951.66882	1951.66791	91
2+4 RQ(33,18)	33	19	1950.99161	1950.99160	1		2+4 PP(36,30)	35	29	1951.67605	1951.67648	-43
2+4 RP(27, 6)	26	7	1951.00522	1951.00573	-51		225 RQ(22, 6)	22	7	1951.69202	1951.69248	-46
225 RQ(35, 6)	35	7	1951.01887	1951.01983	-96		2+4 RQ(22,12)	22	13	1951.69202	1951.69494	-292
2+4 RQ(35,12)	35	13	1951.03528	1951.03532	-4		2+4 RQ(20,15)	20	16	1951.70475	1951.70427	48
2+4 RQ(34,15)	34	16	1951.03528	1951.03747	-219		225 RQ(22, 9)	22	10	1951.71550	1951.71516	34
2+4 RQ(32,18)	32	19	1951.04932	1951.04820	111		2+4 RP(26, 0)	25	1	1951.72897	1951.72707	190
225 RQ(35, 9)	35	10	1951.04932	1951.04891	41		225 RQ(21, 6)	21	7	1951.73286	1951.73173	113
2+4 PP(32,15)	31	14	1951.06795	1951.06654	141		2+4 RQ(21,12)	21	13	1951.73286	1951.73342	-56
2+4 PP(40,36)	39	35	1951.06795	1951.06734	60		225 RQ(21, 9)	21	10	1951.75505	1951.75404	101
2+4 PP(31,12)	30	11	1951.06795	1951.06996	-202		2+4 PP(37,33)	36	32	1951.75505	1951.75655	-151
225 RQ(34, 6)	34	7	1951.08153	1951.08229	-76		225 RQ(20, 6)	20	7	1951.76984	1951.76919	65
2+4 PP(33,18)	32	17	1951.08153	1951.08279	-126		2+4 RQ(20,12)	20	13	1951.76984	1951.77015	-31
2+4 RQ(33,15)	33	16	1951.09636	1951.09637	0		2+4 RQ(18,15)	18	16	1951.76984	1951.77180	-196
2+4 RQ(34,12)	34	13	1951.09636	1951.09657	-21		225 RQ(20, 9)	20	10	1951.78956	1951.79114	-158
2+4 PP(30, 9)	29	8	1951.09636	1951.09666	-30		225 RQ(19, 6)	19	7	1951.80540	1951.80487	52
2+4 RQ(31,18)	31	19	1951.10303	1951.10309	-6		2+4 RQ(19,12)	19	13	1951.80540	1951.80514	26
2+4 PP(34,21)	33	20	1951.11458	1951.11572	-113		2+4 PP(30,15)	29	14	1951.82038	1951.82037	0
2+4 PP(29, 6)	28	5	1951.15122	1951.15088	34		2+4 PP(29,12)	28	11	1951.82038	1951.82103	-66
2+4 RQ(32,15)	32	16	1951.15122	1951.15353	-231		225 RQ(19, 9)	19	10	1951.82714	1951.82648	67
2+4 RP(27, 3)	26	4	1951.15904	1951.15868	36		2+4 PP(31,18)	30	17	1951.84156	1951.83943	213
2+4 PP(41,39)	40	38	1951.15904	1951.15916	-12		2+4 PP(38,36)	37	35	1951.84156	1951.84446	-290
2+4 PP(35,24)	34	23	1951.15904W	1951.16281	-377		225 RQ(18, 9)	18	10	1951.85713	1951.86005	-292
225 RQ(33, 9)	33	10	1951.17253	1951.17087	166		2+4 RQ(17,12)	17	13	1951.87125	1951.86985	139
225 RQ(32, 6)	32	7	1951.20257	1951.20184	73		225 RQ(17, 6)	17	7	1951.87125	1951.87088	37
2+4 RQ(29,18)	29	19	1951.20918	1951.20772	146		2+4 PP(32,21)	31	20	1951.87606	1951.87519	87
2+4 RQ(31,15)	31	16	1951.20918	1951.20897	21		225 RQ(17, 9)	17	10	1951.89242	1951.89185	57
2+4 PP(36,27)	35	26	1951.22249	1951.22202	47		2+4 PP(27, 6)	26	5	1951.89803	1951.89655	148
225 RQ(32, 9)	32	10	1951.22976	1951.22919	56		2+4 RQ(16,12)	16	13	1951.89803	1951.89958	-156
2+4 PP(28, 3)	27	2	1951.23716	1951.23756	-40		2+4 RP(25, 3)	24	4	1951.89803	1951.89997	-195
2+4 PP(42,42)	41	41	1951.25811	1951.25701	110		225 RQ(16, 6)	16	7	1951.89803W	1951.90121	-318
2+4 RQ(28,18)	28	19	1951.25811	1951.25746	66		2+4 PP(33,24)	32	23	1951.92474	1951.92515	-41
225 RQ(31, 6)	31	7	1951.25811	1951.25893	-82		2+4 PP(39,39)	38	38	1951.93927	1951.93922	5
2+4 PP(37,30)	36	29	1951.28979	1951.29163	-185		225 RQ(15, 9)	15	10	1951.95146	1951.95015	131
2+4 RQ(27,18)	27	19	1951.30340	1951.30548	-208		2+4 RQ(14,12)	14	13	1951.95146	1951.95380	-234
225 RQ(30, 6)	30	7	1951.31419	1951.31424	-5		225 RQ(14, 6)	14	7	1951.95562	1951.95651	-89
2+4 RQ(29,15)	29	16	1951.31419	1951.31462	-43		2+4 PP(26, 3)	25	2	1951.98183	1951.98059	124
2+4 RQ(30,12)	30	13	1951.32364	1951.32405	-41		225 RQ(13, 6)	13	7	1951.98183	1951.98148	35
225 RQ(30, 9)	30	10	1951.33973	1951.34053	-81		2+4 PP(34,27)	33	26	1951.98696	1951.98724	-28
2+4 RP(27, 0)	26	1	1951.35425	1951.35552	-127		225 RQ(12, 6)	12	7	1952.00304	1952.00467	-164
225 RQ(29, 6)	29	7	1951.36886	1951.36777	109		2+4 RP(24, 9)	23	10	1952.02100	1952.02050	49

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	(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
225	RQ(11, 6)	11 7	1952.02622	1952.02608	14	2+4	PP(21, 3)	20 2	1953.81059	1953.80940 119
225	RQ(11, 9)	11 10	1952.04535	1952.04555	-20	2+4	PP(29, 27)	28 26	1953.87234	1953.87266 -33
225	RQ(10, 6)	10 7	1952.04535	1952.04570	-35	2+4	RP(20, 0)	19 1	1953.92252	1953.92111 141
2+4	PP(35, 30)	34 29	1952.05979	1952.05976	3	2+4	RP(19, 6)	18 7	1953.93462	1953.93384 78
225	RQ(8, 6)	8 7	1952.07910	1952.07959	-49	2+4	PP(30, 30)	29 29	1953.95266	1953.95253 13
2+4	RP(25, 0)	24 1	1952.09644	1952.09694	-50	225	RR(5, 3)	6 4	1954.01100	1954.01319 -218
2+4	PP(36, 33)	35 32	1952.14119	1952.14130	-11	2+4	PP(23, 12)	22 11	1954.03574	1954.03558 16
2+4	PP(28, 12)	27 11	1952.19411	1952.19416	-5	2+4	PP(24, 15)	23 14	1954.04315	1954.04341 -26
2+4	PP(29, 15)	28 14	1952.19411	1952.19489	-78	2+4	PP(22, 9)	21 8	1954.05150	1954.05116 34
2+4	PP(30, 18)	29 17	1952.21540	1952.21536	4	2+4	PP(25, 18)	24 17	1954.07052	1954.07104 -53
2+4	PP(27, 9)	26 8	1952.21540	1952.21676	-136	2+4	RP(19, 3)	18 4	1954.08424	1954.08361 63
2+4	PP(37, 36)	36 35	1952.23083	1952.23067	16	2+4	PP(21, 6)	20 5	1954.09494	1954.09440 54
2+4	PP(31, 21)	30 20	1952.25213	1952.25254	-41	2+4	PP(26, 21)	25 20	1954.11504	1954.11545 -42
2+4	PP(26, 6)	25 5	1952.26704	1952.26694	10	2+4	PP(20, 3)	19 2	1954.17312	1954.17022 290
2+4	RP(24, 3)	23 4	1952.26704	1952.26811	-107	2+4	PP(27, 24)	26 23	1954.17312	1954.17413 -101
2+4	PP(32, 24)	31 23	1952.30324	1952.30394	-70	2+4	RP(18, 9)	17 10	1954.20054	1954.19846 209
2+4	PP(25, 3)	24 2	1952.34980	1952.34964	16	2+4	PP(28, 27)	27 26	1954.24482	1954.24500 -19
225	RP(23, 12)	22 13	1952.34980	1952.35157	-177	2+4	RP(19, 0)	18 1	1954.28133	1954.28090 44
2+4	PP(33, 27)	32 26	1952.36706	1952.36748	-43	225	RR(6, 3)	7 4	1954.32585	1954.32806 -221
2+4	RP(23, 9)	22 10	1952.38914	1952.38778	136	225	RR(6, 6)	7 7	1954.38517	1954.38626 -109
2+4	PP(34, 30)	33 29	1952.44107	1952.44147	-39	2+4	PP(22, 12)	21 11	1954.39840	1954.39901 -61
2+4	RP(24, 0)	23 1	1952.46389	1952.46514	-125	2+4	PP(23, 15)	22 14	1954.40885	1954.40829 55
2+4	RP(23, 6)	22 7	1952.48315	1952.48336	-21	2+4	PP(21, 9)	20 8	1954.41428	1954.41316 112
2+4	PP(35, 33)	34 32	1952.52435	1952.52447	-12	2+4	PP(24, 18)	23 17	1954.43761	1954.43738 23
2+4	PP(27, 12)	26 11	1952.56647	1952.56567	81	2+4	PP(20, 6)	19 5	1954.45527	1954.45498 29
2+4	PP(28, 15)	27 14	1952.56647	1952.56781	-133	2+4	PP(25, 21)	24 20	1954.48332	1954.48325 6
2+4	PP(26, 9)	25 8	1952.58849	1952.58688	161	2+4	PP(19, 3)	18 2	1954.52941	1954.52938 3
2+4	PP(29, 18)	28 17	1952.58849	1952.58969	-120	2+4	PP(26, 24)	25 23	1954.54295	1954.54341 -46
2+4	PP(36, 36)	35 35	1952.61513	1952.61532	-19	2+4	RP(17, 9)	16 10	1954.55898W	1954.55543 355
2+4	PP(30, 21)	29 20	1952.62793	1952.62831	-38	2+4	PP(27, 27)	26 26	1954.61577	1954.61575 2
2+4	RP(23, 3)	22 4	1952.63548	1952.63457	91	2+4	RP(18, 0)	17 1	1954.63956	1954.63899 57
2+4	PP(25, 6)	24 5	1952.63548	1952.63570	-23	225	RR(7, 3)	8 4	1954.63956	1954.64113 -157
2+4	PP(31, 24)	30 23	1952.68064	1952.68115	-51	2+4	RP(17, 6)	16 7	1954.65294W	1954.64887 407
2+4	PP(24, 3)	23 2	1952.71681	1952.71705	-24	225	RR(7, 6)	8 7	1954.69837	1954.69946 -108
225	RP(22, 12)	21 13	1952.71681	1952.71757	-76	2+4	PP(21, 12)	20 11	1954.76057	1954.76083 -26
2+4	PP(32, 27)	31 26	1952.74587	1952.74615	-28	2+4	PP(22, 15)	21 14	1954.77235	1954.77156 79
2+4	RP(22, 9)	21 10	1952.75439	1952.75335	105	2+4	PP(20, 9)	19 8	1954.77235	1954.77353 -118
2+4	PP(33, 30)	32 29	1952.82084	1952.82160	-76	2+4	RP(17, 3)	16 4	1954.80118W	1954.79803 315
2+4	RP(23, 0)	22 1	1952.83170	1952.83165	4	2+4	PP(23, 18)	22 17	1954.80118	1954.80211 -93
2+4	RP(22, 6)	21 7	1952.84956	1952.84853	103	2+4	PP(19, 6)	18 5	1954.81396	1954.81392 4
2+4	PP(34, 33)	33 32	1952.90578	1952.90607	-29	2+4	PP(24, 21)	23 20	1954.85024	1954.84946 78
2+4	PP(26, 12)	25 11	1952.93739	1952.93557	183	2+4	PP(18, 3)	17 2	1954.88763	1954.88689 74
2+4	PP(32, 27)	26 14	1952.93739	1952.93912	-172	2+4	RP(16, 9)	15 10	1954.91094	1954.91069 25
2+4	PP(25, 9)	24 8	1952.95523	1952.95539	-16	2+4	PP(25, 24)	24 23	1954.91094	1954.91109 -14
2+4	PP(28, 18)	27 17	1952.96251	1952.96243	9	225	RR(8, 3)	9 4	1954.95170	1954.95239 -69
2+4	RP(22, 3)	21 4	1953.00221	1952.99935	286	2+4	RP(17, 0)	16 1	1954.99544	1954.99540 4
2+4	PP(29, 21)	28 20	1953.00221	1953.00248	-27	225	RR(8, 6)	9 7	1955.00929	1955.01086 -157
2+4	PP(24, 6)	23 5	1953.00221	1953.00283	-62	2+4	PP(20, 12)	19 11	1955.12073	1955.12102 -30
2+4	PP(30, 24)	29 23	1953.05686	1953.05678	8	2+4	PP(19, 9)	18 8	1955.13286	1955.13227 59
225	RP(21, 12)	20 13	1953.08244	1953.08184	61	2+4	PP(21, 15)	20 14	1955.13286	1955.13322 -35
2+4	PP(23, 3)	22 2	1953.08244	1953.08281	-37	2+4	RP(16, 3)	15 4	1955.15377	1955.15271 106
2+4	PP(31, 27)	30 26	1953.12271	1953.12324	-53	2+4	PP(22, 18)	21 17	1955.16545	1955.16524 21
2+4	RP(22, 0)	21 1	1953.19893	1953.19649	245	2+4	PP(18, 6)	17 5	1955.17218	1955.17121 97
2+4	PP(32, 30)	31 29	1953.19893	1953.20015	-122	2+4	PP(23, 21)	22 20	1955.21380	1955.21406 -26
2+4	RP(21, 6)	20 7	1953.21058	1953.21200	-142	2+4	PP(17, 3)	16 2	1955.24244	1955.24275 -31
2+4	PP(33, 33)	32 32	1953.28571	1953.28610	-39	225	RR(9, 3)	10 4	1955.26046	1955.26184 -138
2+4	PP(25, 12)	24 11	1953.30466	1953.30385	81	2+4	PP(24, 24)	23 23	1955.27670	1955.27717 -47
2+4	PP(26, 15)	25 14	1953.30963	1953.30882	80	225	RR(9, 6)	10 7	1955.31990	1955.32047 -57
2+4	PP(24, 9)	23 8	1953.32235	1953.32227	8	225	RR(9, 9)	10 10	1955.33854	1955.33971 -118
2+4	PP(27, 18)	26 17	1953.33305	1953.33357	-52	2+4	RP(16, 0)	15 1	1955.35135	1955.35012 124
2+4	RP(21, 3)	20 4	1953.36366	1953.36245	121	2+4	RP(15, 6)	14 7	1955.35748	1955.35708 41
2+4	PP(23, 6)	22 5	1953.36922	1953.36832	90	2+4	PP(19, 12)	18 11	1955.47977	1955.47960 17
2+4	PP(28, 21)	27 20	1953.37536	1953.37507	29	2+4	PP(18, 9)	17 8	1955.49222	1955.48938 284
2+4	PP(29, 24)	28 23	1953.43046	1953.43082	-36	2+4	PP(20, 15)	19 14	1955.49222	1955.49326 -104
2+4	PP(22, 3)	21 2	1953.44672	1953.44693	-21	2+4	RP(15, 3)	14 4	1955.50670	1955.50570 100
2+4	RP(20, 9)	19 10	1953.47736	1953.47934	-198	2+4	PP(21, 18)	20 17	1955.52683	1955.52675 7
2+4	PP(30, 27)	29 26	1953.49860	1953.49874	-15	2+4	PP(17, 6)	16 5	1955.52683	1955.52686 -3
2+4	RP(21, 0)	20 1	1953.55983	1953.55964	19	2+4	PP(22, 21)	21 20	1955.57641	1955.57706 -65
2+4	RP(20, 6)	19 7	1953.57662	1953.57377	285	2+4	PP(16, 3)	15 2	1955.59636	1955.59695 -59
2+4	PP(31, 30)	30 29	1953.57662	1953.57713	-51	225	RR(10, 6)	11 7	1955.62896	1955.62828 68
2+4	PP(24, 12)	23 11	1953.67072	1953.67053	19	225	RR(10, 9)	11 10	1955.64729	1955.64771 -43
2+4	PP(25, 15)	24 14	1953.67681	1953.67692	-11	2+4	RP(15, 0)	14 1	1955.70274	1955.70314 -40
2+4	PP(23, 9)	22 8	1953.68737	1953.68753	-16	2+4	PP(18, 12)	17 11	1955.83551	1955.83654 -104
2+4	PP(26, 18)	25 17	1953.70316	1953.70311	5	2+4	PP(17, 9)	16 8	1955.84534	1955.84485 49
2+4	RP(20, 3)	19 4	1953.72166	1953.72387	-221	2+4	PP(19, 15)	18 14	1955.85231	1955.85168 63
2+4	PP(22, 6)	21 5	1953.73289	1953.73218	71	2+4	RP(14, 3)	13 4	1955.85801	1955.85700 101
2+4	PP(27, 21)	26 20	1953.74573	1953.74606	-33	2+4	PP(16, 6)	15 5	1955.88117	1955.88087 30
2+4	PP(28, 24)	27 23	1953.80343	1953.80327	16	2+4	PP(20, 18)	19 17	1955.88630	1955.88666 -36

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(I)		(II)		(III)	(IV)	(V)	(I)		(II)		(III)	(IV)	(V)
225	RR(11, 6)	12	7	1955.93704	1955.93430	274	225	RR(16, 6)	17	7	1957.43634	1957.43743	-109
2+4	PP(21,21)	20	20	1955.93704	1955.93846	-142	2+4	RP(10, 0)	9	1	1957.44392	1957.44285	107
2+4	PP(15, 3)	14	2	1955.95284W	1955.94949	335	225	RR(16, 9)	17	10	1957.45757	1957.45834	-77
225	RR(11, 9)	12	10	1955.95284	1955.95394	-110	225	RQ(60,24)	60	25	1957.45757	1957.45968	-211
2+4	RP(14, 0)	13	1	1956.05496	1956.05448	49	2+4	RQ(57, 9)	57	10	1957.47674	1957.47798	-124
2+4	PP(17,12)	16	11	1956.19237	1956.19186	50	225	RQ(57,18)	57	19	1957.48250	1957.48298	-48
2+4	PP(16, 9)	15	8	1956.19864	1956.19869	-5	2+4	RQ(60, 3)	60	4	1957.48725	1957.48731	-6
2+4	RP(13, 3)	12	4	1956.20831	1956.20661	171	2+4	RQ(58, 6)	58	7	1957.48725	1957.48785	-59
2+4	PP(18,15)	17	14	1956.20831	1956.20849	-18	225	RQ(56,12)	56	13	1957.52858	1957.52666	192
2+4	PP(15, 6)	14	5	1956.23231	1956.23323	-91	2+4	RQ(62, 0)	62	1	1957.54539	1957.54527	12
2+4	RR(12,12)	13	13	1956.23231	1956.23522	-290	2+4	PQ(70, 9)	70	8	1957.54539	1957.54606	-67
2+4	PP(19,18)	18	17	1956.24507	1956.24496	10	2+4	PQ(67, 6)	67	5	1957.54539	1957.54730	-192
225	RR(12, 9)	13	10	1956.25823	1956.25838	-15	225	RQ(59,24)	59	25	1957.56738	1957.56888	-149
2+4	PP(14, 3)	13	2	1956.30081	1956.30036	45	225	RQ(56,18)	56	19	1957.58615	1957.58471	143
2+4	RP(13, 0)	12	1	1956.40147	1956.40412	-265	2+4	RP(9, 3)	8	4	1957.58615	1957.58809	-194
225	RR(13, 3)	14	4	1956.48184	1956.48153	31	2+4	RQ(59, 3)	59	4	1957.58615	1957.58863	-249
2+4	RR(13,12)	14	13	1956.53948	1956.53812	135	2+4	PP(13,12)	12	11	1957.59687	1957.59686	1
225	RR(13, 6)	14	7	1956.53948	1956.54095	-147	2+4	PP(12, 9)	11	8	1957.59687	1957.59766	-79
2+4	PP(16,12)	15	11	1956.54651	1956.54556	95	225	RQ(55,12)	55	13	1957.62553	1957.62431	122
2+4	PP(15, 9)	14	8	1956.55122	1956.55089	33	2+4	PP(11, 6)	10	5	1957.62553	1957.62616	-63
225	RR(13, 9)	14	10	1956.56264	1956.56104	160	2+4	RQ(61, 0)	61	1	1957.64867	1957.64773	94
2+4	PP(17,15)	16	14	1956.56264	1956.56368	-104	2+4	PQ(66, 6)	66	5	1957.65605	1957.65754	-150
2+4	PP(14, 6)	13	5	1956.58409	1956.58394	16	2+4	RR(17,15)	18	16	1957.66589	1957.66542	47
2+4	PP(18,18)	17	17	1956.60106	1956.60165	-59	225	RR(17, 3)	18	4	1957.67272	1957.67218	54
2+4	PP(13, 3)	12	2	1956.64926	1956.64958	-33	2+4	RQ(55, 9)	55	10	1957.67272	1957.67417	-145
2+4	RQ(64, 9)	64	10	1956.73699	1956.73651	48	2+4	PP(10, 3)	9	2	1957.68755	1957.68725	30
2+4	RP(12, 0)	11	1	1956.75152	1956.75206	-54	2+4	RQ(56, 6)	56	7	1957.68755	1957.68792	-37
225	RR(14, 3)	15	4	1956.78001	1956.78191	-191	2+4	RQ(58, 3)	58	4	1957.68755	1957.68831	-76
225	RQ(63,12)	63	13	1956.79750	1956.79626	124	2+4	RQ(56, 6)	56	7	1957.71738	1957.71594	144
2+4	RR(14,12)	15	13	1956.83950	1956.83927	24	225	RQ(54,12)	54	13	1957.72165	1957.72027	137
225	RR(14, 6)	15	7	1956.83950	1956.84158	-208	2+4	RR(17,12)	18	13	1957.73217	1957.73210	7
225	RR(14, 9)	15	10	1956.86087	1956.86192	-106	225	RR(17, 6)	18	7	1957.73217	1957.73266	-49
225	RQ(65,24)	65	25	1956.88732	1956.88717	14	225	RR(17, 9)	18	10	1957.75443	1957.75387	56
2+4	PP(15,12)	14	11	1956.89949	1956.89762	187	2+4	PQ(65, 6)	65	5	1957.76682	1957.76618	64
2+4	PP(14, 9)	13	8	1956.89949	1956.90145	-196	2+4	PQ(68, 9)	68	8	1957.77483	1957.77345	138
2+4	PP(16,15)	15	14	1956.91701	1956.91725	-24	2+4	RQ(55, 6)	55	7	1957.78530	1957.78534	-4
2+4	PP(13, 6)	12	5	1956.93242	1956.93300	-57	2+4	RP(9, 0)	8	1	1957.78530	1957.78570	-40
225	RQ(62,18)	62	19	1956.94576	1956.94828	-252	2+4	RQ(57, 3)	57	4	1957.78530	1957.78634	-105
2+4	RQ(65, 3)	65	4	1956.95743	1956.95619	125	225	RQ(53,12)	53	13	1957.81439	1957.81454	-15
2+4	RQ(62, 9)	62	10	1956.95743	1956.95706	38	225	RQ(53,15)	53	16	1957.81439	1957.81584	-145
2+4	PP(12, 3)	11	2	1956.99780	1956.99714	67	2+4	RQ(59, 0)	59	1	1957.84829	1957.84783	46
225	RQ(61,15)	61	16	1957.00471	1957.00438	33	2+4	RR(18,18)	19	19	1957.84829	1957.84863	-34
225	RQ(64,24)	64	25	1957.00471	1957.00521	-49	225	RQ(53,18)	53	19	1957.88012	1957.87946	66
2+4	RR(15,15)	16	16	1957.07112	1957.07136	-24	2+4	*Q(54, 6)	54	10	1957.88012	1957.88101	-89
225	RR(15, 3)	16	4	1957.07954	1957.08049	-94	2+4	PQ(67, 9)	67	8	1957.88519	1957.88476	43
2+4	RP(11, 0)	10	1	1957.09740	1957.09830	-90	225	RQ(56,24)	56	25	1957.88519	1957.88578	-59
2+4	RQ(62, 6)	62	7	1957.10723	1957.10721	2	2+4	RQ(53, 9)	53	10	1957.88519	1957.88626	-107
225	RQ(63,24)	63	25	1957.12103	1957.12148	-45	2+4	RQ(54, 6)	54	7	1957.90659	1957.90551	107
2+4	RR(15,12)	16	13	1957.13829	1957.13864	-35	225	RQ(54,21)	54	22	1957.90659	1957.90648	11
225	RR(15, 6)	16	7	1957.13829	1957.14041	-211	225	RQ(52,12)	52	13	1957.90659	1957.90712	-53
225	RR(15, 9)	16	10	1957.16056	1957.16102	-46	225	RQ(52,15)	52	16	1957.90659	1957.90953	-294
2+4	RQ(63, 3)	63	4	1957.17348	1957.17353	-5	2+4	PP(11, 9)	10	8	1957.94332	1957.94329	3
225	RQ(61,21)	61	22	1957.17348	1957.17437	-89	2+4	PP(12,12)	11	11	1957.94332	1957.94403	-71
2+4	PQ(70, 6)	70	5	1957.20655	1957.20701	-45	2+4	RQ(58, 0)	58	1	1957.94332	1957.94546	-214
225	RQ(59,15)	59	16	1957.21568	1957.21752	-184	2+4	*Q(52, 9)	52	13	1957.95633	1957.95540	93
225	RQ(59,12)	59	13	1957.22132	1957.22361	-229	2+4	RR(18,15)	19	16	1957.96032	1957.95982	50
225	RQ(62,24)	62	25	1957.23716	1957.23598	117	2+4	PP(10, 6)	9	5	1957.97160	1957.97026	134
2+4	RP(10, 3)	9	4	1957.24863W	1957.24526	337	225	RQ(52,18)	52	19	1957.97160	1957.97421	-261
2+4	PP(14,12)	13	11	1957.24863	1957.24806	58	2+4	RQ(52, 9)	52	10	1957.97718	1957.97671	47
2+4	PP(13, 9)	12	8	1957.24863	1957.25037	-174	2+4	RQ(55, 3)	55	4	1957.97718	1957.97747	-29
2+4	PP(15,15)	14	14	1957.26917	1957.26920	-2	2+4	PQ(63, 6)	63	5	1957.97718	1957.97865	-147
2+4	RQ(62, 3)	62	4	1957.28070	1957.27976	94	225	RQ(55,24)	55	25	1957.98750	1957.98785	-35
2+4	PP(12, 6)	11	5	1957.28070	1957.28040	30	2+4	RQ(53, 6)	53	7	1957.99755	1957.99780	-25
2+4	RQ(60, 6)	60	7	1957.31773	1957.31681	92	225	RQ(51,12)	51	13	1957.99755	1957.99799	-43
225	RQ(58,15)	58	16	1957.32324	1957.32153	170	225	RQ(53,21)	53	22	1958.00413	1958.00401	12
2+4	PQ(69, 6)	69	5	1957.32324	1957.32204	120	225	RR(18, 6)	19	7	1958.02647	1958.02608	39
2+4	RQ(64, 0)	64	1	1957.33435	1957.33554	-119	2+4	RR(18,12)	19	13	1958.02647	1958.02618	29
2+4	PP(11, 3)	10	2	1957.34347	1957.34303	45	2+4	PP(9, 3)	8	2	1958.02647W	1958.02981	-334
2+4	RR(16,15)	17	16	1957.36915	1957.36926	-11	2+4	RQ(57, 0)	57	1	1958.04244	1958.04149	95
225	RR(16, 3)	17	4	1957.37731	1957.37724	6	2+4	*Q(51, 9)	51	13	1958.04729	1958.04565	164
2+4	RQ(58, 9)	58	10	1957.37731	1957.37727								

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
2+4 RP(8, 0)	7	1	1958.12670	1958.12685	-14	225 RQ(43,15)	43	16	1958.67437	1958.67462	-24
2+4 RR(19,18)	20	19	1958.14135	1958.14161	-26	2+4 RQ(47, 3)	47	4	1958.67437	1958.67566	-128
2+4 *Q(51, 6)	51	10	1958.15860	1958.15755	105	2+4 PQ(63,12)	63	11	1958.67437	1958.67583	-146
225 RQ(50,18)	50	19	1958.15860	1958.15846	14	2+4 RQ(45, 6)	45	7	1958.67437	1958.67651	-214
2+4 RQ(53, 3)	53	4	1958.16372	1958.16198	174	2+4 *Q(43, 9)	43	13	1958.70619	1958.70429	190
2+4 RQ(51, 6)	51	7	1958.17733	1958.17740	-7	2+4 PP(7, 3)	6	2	1958.71017	1958.70991	26
225 RQ(49,15)	49	16	1958.17733	1958.18021	-288	225 RQ(50,27)	50	28	1958.71017	1958.71054	-37
2+4 PQ(61, 6)	61	5	1958.18394	1958.18468	-75	2+4 RQ(43, 9)	43	10	1958.71742	1958.71651	91
225 RQ(51,21)	51	22	1958.19409	1958.19376	32	2+4 PQ(59, 9)	59	8	1958.71742	1958.71757	-15
2+4 PQ(64, 9)	64	8	1958.20888	1958.20909	-21	225 RQ(45,21)	45	22	1958.71742	1958.72035	-293
2+4 RQ(49, 9)	49	10	1958.22049	1958.22089	-40	2+4 RR(21,18)	22	19	1958.72218	1958.72237	-19
2+4 RQ(52, 3)	52	4	1958.25220	1958.25175	45	225 RQ(42,12)	42	13	1958.73922	1958.73872	50
2+4 RR(19,15)	20	16	1958.25220	1958.25248	-27	225 RQ(47,24)	47	25	1958.73922	1958.73991	-68
2+4 RQ(50, 6)	50	7	1958.26524	1958.26471	52	2+4 *Q(44, 6)	44	10	1958.73922	1958.74124	-202
225 RQ(48,15)	48	16	1958.26524	1958.26697	-173	225 RQ(42,15)	42	16	1958.75207	1958.75091	117
2+4 PQ(60, 6)	60	5	1958.28668	1958.28529	139	2+4 RQ(49, 0)	49	1	1958.75207	1958.75132	75
225 RQ(50,21)	50	22	1958.28668	1958.28598	70	2+4 RQ(44, 6)	44	7	1958.75207	1958.75394	-187
2+4 PP(10, 9)	9	8	1958.28668	1958.28729	-61	2+4 RQ(46, 3)	46	4	1958.75207W	1958.75544	-336
2+4 RQ(48, 9)	48	10	1958.30670	1958.30588	82	2+4 PQ(55, 6)	55	5	1958.76336	1958.76406	-71
2+4 PP(9, 6)	8	5	1958.31397	1958.31271	126	2+4 *Q(42, 9)	42	13	1958.77772	1958.77864	-92
2+4 PQ(63, 9)	63	8	1958.31397	1958.31400	-3	2+4 PQ(62,12)	62	11	1958.77772	1958.77869	-97
225 RR(19, 6)	20	7	1958.31929	1958.31770	159	2+4 RQ(42, 9)	42	10	1958.79085	1958.79051	34
2+4 RR(19,12)	20	13	1958.31929	1958.31849	80	225 RQ(44,21)	44	22	1958.80215	1958.80187	29
2+4 RQ(54, 0)	54	1	1958.31929	1958.31985	-56	225 RQ(49,27)	49	28	1958.80215	1958.80265	-50
2+4 *Q(49, 6)	49	10	1958.33292	1958.33315	-23	2+4 RP(6, 0)	5	1	1958.80215	1958.80403	-188
225 RQ(48,18)	48	19	1958.33292	1958.33568	-276	225 RQ(41,12)	41	13	1958.81421	1958.81241	180
225 RR(19, 9)	20	10	1958.33982	1958.33957	25	2+4 PQ(58, 9)	58	8	1958.81421	1958.81445	-24
2+4 RQ(51, 3)	51	4	1958.33982	1958.33986	-4	2+4 RR(21,15)	22	16	1958.83282	1958.83252	29
2+4 RQ(49, 6)	49	7	1958.35066	1958.35037	29	2+4 RQ(48, 0)	48	1	1958.83282	1958.83273	9
225 RQ(47,15)	47	16	1958.35066	1958.35199	-132	2+4 RQ(45, 3)	45	4	1958.83282	1958.83354	-72
2+4 PP(8, 3)	7	2	1958.37112	1958.37069	43	225 RR(21, 3)	22	4	1958.83282	1958.83375	-93
2+4 PQ(56, 3)	56	2	1958.37112	1958.37214	-101	2+4 PQ(54, 6)	54	5	1958.85670	1958.85496	174
2+4 PQ(59, 6)	59	5	1958.38508	1958.38428	81	2+4 RR(22,21)	23	22	1958.85670	1958.85742	-72
2+4 RQ(53, 0)	53	1	1958.40983	1958.40940	44	2+4 RQ(41, 9)	41	10	1958.86436	1958.86289	147
2+4 PQ(62, 9)	62	8	1958.41848	1958.41730	118	225 RQ(43,21)	43	22	1958.88151	1958.88160	-9
2+4 *Q(48, 6)	48	10	1958.41848	1958.41831	17	225 RQ(40,12)	40	13	1958.88151	1958.88436	-286
225 RQ(47,18)	47	19	1958.41848W	1958.42165	-316	2+4 RQ(42, 6)	42	7	1958.89599W	1958.89202	397
2+4 RQ(50, 3)	50	4	1958.42744	1958.42631	113	225 RQ(48,27)	48	28	1958.89599W	1958.89296	303
225 RQ(46,12)	46	13	1958.42744	1958.42670	74	225 RR(21, 6)	22	7	1958.89599	1958.89552	47
2+4 RR(20,18)	21	19	1958.43364	1958.43286	78	2+4 RR(21,12)	22	13	1958.89599	1958.89779	-180
2+4 RQ(48, 6)	48	7	1958.43364	1958.43437	-73	225 RQ(40,15)	40	16	1958.89599	1958.89823	-224
225 RQ(46,15)	46	16	1958.43364	1958.43526	-162	225 RQ(41,18)	41	19	1958.89599W	1958.90037	-438
225 RQ(48,21)	48	22	1958.46478	1958.46507	-29	2+4 PQ(57, 9)	57	8	1958.90871	1958.90970	-99
2+4 PQ(55, 3)	55	2	1958.46478	1958.46515	-37	225 RQ(45,24)	45	25	1958.90871	1958.90993	-121
2+4 PQ(65,12)	65	11	1958.46478	1958.46532	-53	2+4 RQ(44, 3)	44	4	1958.90871	1958.90997	-126
2+4 RP(7, 0)	6	1	1958.46478	1958.46629	-151	2+4 RQ(47, 0)	47	1	1958.90871W	1958.91250	-378
2+4 *Q(46, 9)	46	13	1958.47214	1958.47057	157	225 RR(21, 9)	22	10	1958.91770	1958.91812	-42
225 RQ(50,24)	50	25	1958.47214	1958.47135	78	2+4 RQ(40, 9)	40	10	1958.93288	1958.93362	-74
2+4 PQ(58, 6)	58	5	1958.48347	1958.48165	181	2+4 PQ(53, 6)	53	5	1958.94456	1958.94423	33
2+4 RQ(46, 9)	46	10	1958.48347	1958.48469	-122	225 RQ(39,12)	39	13	1958.95533	1958.95459	74
2+4 RQ(52, 0)	52	1	1958.49691	1958.49732	-41	2+4 PQ(64,15)	64	14	1958.95533	1958.95610	-77
225 RQ(46,18)	46	19	1958.50756	1958.50585	171	2+4 RQ(41, 6)	41	7	1958.96490	1958.96473	17
225 RQ(45,12)	45	13	1958.50756	1958.50729	27	225 RQ(39,15)	39	16	1958.97067	1958.96925	142
2+4 RQ(49, 3)	49	4	1958.50756W	1958.51109	-353	225 RQ(40,18)	40	19	1958.97067W	1958.97396	-329
2+4 RQ(47, 6)	47	7	1958.51778	1958.51673	105	2+4 RQ(46, 0)	46	1	1958.99158	1958.99063	95
225 RQ(45,15)	45	16	1958.51778	1958.51679	99	2+4 *Q(39, 9)	39	13	1958.99158	1958.99099	60
2+4 PQ(61, 9)	61	8	1958.51778	1958.51900	-122	225 RQ(44,24)	44	25	1958.99158	1958.99223	-65
2+4 RR(20,15)	21	16	1958.54381	1958.54338	44	2+4 PP(7, 6)	6	5	1958.99158	1958.99263	-104
225 RR(20, 3)	21	4	1958.54381	1958.54609	-227	2+4 PQ(39, 9)	39	10	1959.00332	1959.00270	62
2+4 RR(21,21)	22	22	1958.56915	1958.56930	-16	2+4 RQ(56, 9)	56	8	1959.00332	1959.00335	-3
2+4 PQ(64,12)	64	11	1958.56915	1958.57138	-223	2+4 RR(22,18)	23	19	1959.00982	1959.01014	-32
2+4 RQ(46, 6)	46	7	1958.58375	1958.58333	43	225 RQ(38,12)	38	13	1959.02355	1959.02307	48
2+4 RQ(51, 0)	51	1	1958.58375	1958.58362	14	2+4 PQ(52, 6)	52	5	1959.03144	1959.03188	-44
225 RQ(44,12)	44	13	1958.58375	1958.58616	-241	2+4 RQ(40, 6)	40	7	1959.03532	1959.03565	-34
2+4 RQ(48, 3)	48	4	1958.59490	1958.59421	69	225 RQ(41,21)	41	22	1959.03532	1959.03568	-37
225 RQ(44,15)	44	16	1958.59490	1958.59658	-168	225 RQ(38,15)	38	16	1959.03532W	1959.03852	-321
225 RR(20, 6)	21	7	1958.60796	1958.60751	45	225 RQ(39,18)	39	19	1959.04614	1959.04577	37
2+4 RR(20,12)	21	13	1958.60796	1958.60902	-106	2+4 PP(6, 3)	5	2	1959.04614	1959.04746	-131
2+4 PQ(60, 9)	60	8	1958.61877	1958.61909	-32	2+4 RQ(42, 3)	42	4	1959.05772	1959.05781	-8
2+4 RQ(44, 9)	44	10	1958.62942	1958.62816	125	2+4 *Q(38, 9)	38	13	1959.05772	1959.05823	-50
2+4 PP(9, 9)	8	8	1958.62942	1958.62964	-22	2+4 PQ(63,15)	63	14	1959.05772	1959.06017	-245
225 RR(20, 9)	21	10	1958.62942	1958.62974	-33	2+4 RQ(45, 0)	45	1	1959.06903	1959.06713	190
225 RQ(48,24)	48	25	1958.65349	1958.65219	130	225 RQ(46,27)	46	28	1959.06903	1959.06810	93
2+4 PP(8, 6)	7	5	1958.65349	1958.65349	0	2+4 RQ(38, 9)	38	10	1959.06903	1959.07013	-111
2+4 *Q(45, 6)	45	10	1958.66441	1958.66317	124	2+4 PQ(48, 3)	48	2	1959.06903	1959.07070	-167
225 RQ(43,12)	43	13	1958.66441	1958.66330	111	225 RQ(43,24)	43	25	1959.06903W	1959.07273	-370
2+4 RQ(50, 0)	50	1	1958.66441W	1958.66828	-387	225 RQ(37,12)	37	13	1959.09153	1959.08982	171
225 RQ(44,18)	44	19	1958.66441W	1958.66897	-455	2+4 PQ(55, 9)	55	8	1959.09577	1959.09538	39

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(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
2+4 RQ(39, 6)	39 7	1959.10548	1959.10480	68	2+4 PQ(51, 9)	51 8	1959.44570	1959.44731	-161
225 RQ(37,15)	37 16	1959.10548	1959.10604	-56	225 RQ(38,24)	38 25	1959.44570	1959.44803	-233
225 RR(22, 3)	23 4	1959.11828	1959.11611	217	2+4 PQ(55,12)	55 11	1959.45440	1959.45373	67
2+4 PQ(51, 6)	51 5	1959.11828	1959.11790	38	225 RQ(31,12)	31 13	1959.45440	1959.45376	64
2+4 RR(22,15)	23 16	1959.11828	1959.11992	-163	2+4 PQ(43, 3)	43 2	1959.45440	1959.45414	26
2+4 RQ(41, 3)	41 4	1959.12884	1959.12921	-37	225 RQ(35,21)	35 22	1959.45440	1959.45485	-45
2+4 RP(5, 0)	4 1	1959.14321W	1959.14007	314	2+4 PQ(67,21)	67 20	1959.46139	1959.46045	94
2+4 RQ(44, 0)	44 1	1959.14321	1959.14199	122	2+4 PQ(59,15)	59 14	1959.46139	1959.46047	92
2+4 RR(23,21)	24 22	1959.14321	1959.14382	-61	2+4 RQ(36, 3)	36 4	1959.46139	1959.46095	44
2+4 PQ(47, 3)	47 2	1959.15164	1959.15067	97	2+4 PQ(63,18)	63 17	1959.46139	1959.46376	-237
225 RQ(42,24)	42 25	1959.15164	1959.15141	23	2+4 RR(23,12)	24 13	1959.47136	1959.47000	136
225 RQ(45,27)	45 28	1959.15164	1959.15294	-130	225 RQ(41,27)	41 28	1959.47136	1959.47404	-268
225 RQ(36,12)	36 13	1959.15164W	1959.15484	-319	225 RQ(31,15)	31 16	1959.47136	1959.47411	-275
2+4 PQ(62,15)	62 14	1959.16213	1959.16265	-52	2+4 RQ(33, 6)	33 7	1959.48313	1959.48273	40
225 RQ(36,15)	36 16	1959.17227	1959.17179	48	225 RR(23, 9)	24 10	1959.49098	1959.48951	146
2+4 RQ(38, 6)	38 7	1959.17227	1959.17218	9	2+4 RQ(39, 0)	39 1	1959.49098	1959.49164	-66
2+4 PQ(58,12)	58 11	1959.17227	1959.17407	-181	2+4 RQ(31, 9)	31 10	1959.49642	1959.49506	136
225 RR(22, 6)	23 7	1959.18302	1959.18172	130	225 RQ(32,18)	32 19	1959.49642	1959.49863	-221
225 RQ(39,21)	39 22	1959.18302	1959.18260	42	225 RQ(30,12)	30 13	1959.50807	1959.50831	-23
225 RQ(37,18)	37 19	1959.18302	1959.18407	-105	225 RQ(37,24)	37 25	1959.51944	1959.51765	179
2+4 RR(22,12)	23 13	1959.18302	1959.18478	-176	225 RQ(34,21)	34 22	1959.51944	1959.51841	103
2+4 PQ(54, 9)	54 8	1959.18302	1959.18579	-277	2+4 RR(25,24)	26 25	1959.51944	1959.52025	-81
2+4 RQ(40, 3)	40 4	1959.20145	1959.19892	253	2+4 RQ(35, 3)	35 4	1959.51944	1959.52224	-280
2+4 RQ(36, 9)	36 10	1959.20145	1959.19999	146	225 RQ(30,15)	30 16	1959.52821	1959.52928	-107
2+4 PQ(50, 6)	50 5	1959.20145	1959.20229	-84	2+4 PQ(50, 9)	50 8	1959.52821W	1959.53124	-302
225 RR(22, 9)	23 10	1959.20145W	1959.20472	-327	2+4 RQ(32, 6)	32 7	1959.53996	1959.53962	34
2+4 RQ(43, 0)	43 1	1959.21601	1959.21521	80	2+4 RQ(30, 9)	30 10	1959.55065	1959.54895	170
225 RQ(35,12)	35 13	1959.21601	1959.21811	-210	225 RQ(40,27)	40 28	1959.55065	1959.54975	90
225 RQ(41,24)	41 25	1959.22723	1959.22829	-106	225 RQ(31,18)	31 19	1959.55672	1959.55618	54
2+4 PQ(46, 3)	46 2	1959.22723	1959.22900	-177	2+4 PQ(58,15)	58 14	1959.55672	1959.55654	18
225 RQ(35,15)	35 16	1959.23624	1959.23578	45	2+4 RQ(38, 0)	38 1	1959.55672	1959.55663	10
225 RQ(44,27)	44 28	1959.23624	1959.23595	28	225 RQ(29,12)	29 13	1959.56244	1959.56111	133
2+4 RR(24,24)	25 25	1959.23624	1959.23695	-71	2+4 PQ(70,24)	70 23	1959.56244	1959.56230	13
2+4 RQ(37, 6)	37 7	1959.23624	1959.23779	-155	2+4 PQ(66,21)	66 20	1959.56822	1959.56870	-49
2+4 PQ(69,21)	69 20	1959.23624	1959.23918	-294	225 RQ(33,21)	33 22	1959.58103	1959.58017	86
225 RQ(36,18)	36 19	1959.25074	1959.25054	20	2+4 RR(24,18)	25 19	1959.58103	1959.58047	57
225 RQ(38,21)	38 22	1959.25074	1959.25336	-262	2+4 RQ(34, 3)	34 4	1959.58103	1959.58184	-81
2+4 RQ(35, 9)	35 10	1959.26354	1959.26240	114	225 RQ(29,15)	29 16	1959.58103	1959.58268	-165
2+4 PQ(61,15)	61 14	1959.26354	1959.26353	2	2+4 RQ(31, 6)	31 7	1959.59707	1959.59478	230
2+4 RQ(39, 3)	39 4	1959.26887	1959.26696	192	2+4 PQ(41, 3)	41 2	1959.59707	1959.59600	107
2+4 PQ(57,12)	57 11	1959.26887	1959.26890	-3	2+4 PQ(45, 6)	45 5	1959.59707	1959.59976	-268
2+4 PQ(53, 9)	53 8	1959.27504	1959.27458	45	2+4 RQ(29, 9)	29 10	1959.59707W	1959.60112	-404
225 RQ(34,12)	34 13	1959.28088	1959.27964	125	225 RQ(30,18)	30 19	1959.61177	1959.61195	-18
2+4 PQ(49, 6)	49 5	1959.28592	1959.28505	88	225 RQ(28,12)	28 13	1959.61177	1959.61215	-38
2+4 RQ(42, 0)	42 1	1959.28592	1959.28678	-86	2+4 PQ(49, 9)	49 8	1959.61177	1959.61354	-177
2+4 RR(23,18)	24 19	1959.29722	1959.29617	105	2+4 RQ(37, 0)	37 1	1959.62040	1959.61997	44
225 RQ(34,15)	34 16	1959.29722	1959.29801	-79	225 RQ(39,27)	39 28	1959.62040W	1959.62362	-321
2+4 RQ(36, 6)	36 7	1959.30288	1959.30164	123	225 RQ(28,15)	28 16	1959.63622	1959.63431	192
225 RQ(40,24)	40 25	1959.30288	1959.30335	-47	2+4 RQ(33, 3)	33 4	1959.63622W	1959.63976	-353
225 RR(23, 0)	24 1	1959.30288	1959.30444	-156	2+4 RQ(30, 6)	30 7	1959.64960	1959.64821	139
2+4 PQ(45, 3)	45 2	1959.30288	1959.30569	-281	2+4 PQ(57,15)	57 14	1959.64960	1959.65101	-141
225 RQ(35,18)	35 19	1959.31307	1959.31524	-217	2+4 RQ(28, 9)	28 10	1959.64960	1959.65157	-197
225 RQ(37,21)	37 22	1959.32319	1959.32232	87	225 RQ(27,12)	27 13	1959.66313	1959.66145	168
2+4 RQ(34, 9)	34 10	1959.32319	1959.32312	8	2+4 PQ(40, 3)	40 2	1959.66313	1959.66446	-133
2+4 PP(6, 6)	5 5	1959.33143	1959.33010	133	225 RQ(29,18)	29 19	1959.66313	1959.66593	-280
2+4 RQ(38, 3)	38 4	1959.33143	1959.33331	-188	2+4 PQ(44, 6)	44 5	1959.67445	1959.67434	11
225 RQ(33,12)	33 13	1959.33949	1959.33942	7	2+4 PQ(69,24)	69 23	1959.67445	1959.67508	-63
2+4 RQ(41, 0)	41 1	1959.36143W	1959.35671	472	2+4 PQ(65,21)	65 20	1959.67445	1959.67537	-91
225 RQ(33,15)	33 16	1959.36143	1959.35848	295	2+4 RQ(36, 0)	36 1	1959.68202	1959.68166	36
2+4 PQ(52, 9)	52 8	1959.36143	1959.36176	-32	225 RQ(27,15)	27 16	1959.68202	1959.68416	-214
2+4 PQ(56,12)	56 11	1959.36143	1959.36212	-69	225 RR(24, 3)	25 4	1959.68202W	1959.68579	-377
2+4 PQ(60,15)	60 14	1959.36143	1959.36280	-137	2+4 RR(24,15)	25 16	1959.68987	1959.68943	44
2+4 RQ(35, 6)	35 7	1959.36143	1959.36375	-232	225 RQ(38,27)	38 28	1959.69665	1959.69566	99
2+4 PQ(44, 3)	44 2	1959.38096	1959.38074	22	2+4 RQ(32, 3)	32 4	1959.69665	1959.69597	67
2+4 RQ(33, 9)	33 10	1959.38096	1959.38214	-118	225 RQ(31,21)	31 22	1959.69665	1959.69827	-162
2+4 PP(5, 3)	4 2	1959.38096	1959.38333	-238	2+4 RQ(29, 6)	29 7	1959.70098	1959.69991	107
225 RQ(42,27)	42 28	1959.39778	1959.39651	127	2+4 RQ(27, 9)	27 10	1959.70098	1959.70029	69
225 RQ(32,12)	32 13	1959.39778	1959.39746	31	2+4 RR(25,21)	26 22	1959.71233	1959.71144	89
2+4 RQ(37, 3)	37 4	1959.39778	1959.39797	-20	225 RQ(34,24)	34 25	1959.71889W	1959.71558	330
225 RR(23, 3)	24 4	1959.40524	1959.40360	164	2+4 PP(4, 3)	3 2	1959.71889	1959.71753	135
2+4 RR(23,15)	24 16	1959.40524	1959.40555	-31	225 RQ(28,18)	28 19	1959.71889	1959.71812	76
225 RQ(32,15)	32 16	1959.41828	1959.41718	111	2+4 PQ(52,12)	52 11	1959.71889	1959.71888	1
2+4 RQ(34, 6)	34 7	1959.42657	1959.42411	247	2+4 PQ(39, 3)	39 2	1959.73104	1959.73127	-24
2+4 RQ(40, 0)	40 1	1959.42657	1959.42500	158	225 RQ(26,15)	26 16	1959.73104	1959.73225	-121
2+4 RR(24,21)	25 22	1959.42657	1959.42849	-191	2+4 RQ(35, 0)	35 1	1959.74115	1959.74169	-55
225 RQ(33,18)	33 19	1959.43925	1959.43928	-4	2+4 PQ(56,15)	56 14	1959.74115	1959.74387	-272
2+4 RQ(32, 9)	32 10	1959.43925	1959.43945	-20	225 RR(24, 6)	25 7	1959.75047	1959.74870	177
2+4 PQ(47, 6)	47 5	1959.44570	1959.44567	3	2+4 RQ(28, 6)	28 7	1959.75047	1959.74990	57

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
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5	2+4 RQ(31, 3)	31 4	1959.75047	1959.75050	-3	2+4 RQ(21, 6)	21 7	1960.05129	1960.05157	-29	
6	2+4 RR(24, 12)	25 13	1959.75047	1959.75344	-297	2+4 PQ(57, 18)	57 17	1960.05129	1960.05271	-142	
7	2+4 PQ(60, 18)	60 17	1959.76519	1959.76543	-24	225 RQ(18, 15)	18 16	1960.05129	1960.05302	-174	
8	225 RQ(37, 27)	37 28	1959.76519	1959.76587	-67	225 RR(25, 9)	26 10	1960.05129	1960.05373	-245	
9	225 RQ(27, 18)	27 19	1959.76519W	1959.76852	-333	2+4 RQ(29, 0)	29 1	1960.06821	1960.06714	107	
10	225 RR(24, 9)	25 10	1959.77355	1959.77252	103	2+4 RR(27, 24)	28 25	1960.08173	1960.08170	3	
11	2+4 PQ(47, 9)	47 8	1959.77355	1959.77327	28	2+4 RQ(24, 3)	24 4	1960.08666	1960.08470	196	
12	225 RQ(33, 24)	33 25	1959.77982	1959.77792	190	225 RQ(17, 15)	17 16	1960.08666	1960.08512	154	
13	225 RQ(25, 15)	25 16	1959.77982	1959.77856	126	2+4 PQ(61, 21)	61 20	1960.08666	1960.08608	58	
14	2+4 PQ(64, 21)	64 20	1959.77982	1959.78043	-62	2+4 PQ(38, 6)	38 5	1960.08666	1960.08740	-74	
15	2+4 RQ(25, 9)	25 10	1959.79369	1959.79256	113	2+4 RQ(20, 6)	20 7	1960.08666	1960.08779	-113	
16	2+4 PQ(38, 3)	38 2	1959.79369	1959.79642	-273	225 RQ(16, 12)	16 13	1960.08666	1960.08792	-126	
17	2+4 RQ(27, 6)	27 7	1959.80041	1959.79816	225	2+4 PQ(33, 3)	33 2	1960.09747	1960.09736	11	
18	225 RQ(24, 12)	24 13	1959.80041	1959.79883	158	225 RQ(23, 21)	23 22	1960.09747	1960.09832	-85	
19	2+4 RQ(34, 0)	34 1	1959.80041	1959.80007	34	2+4 PQ(52, 15)	52 14	1960.09747	1960.09922	-175	
20	2+4 RR(26, 24)	27 25	1959.80041	1959.80183	-142	225 RQ(27, 24)	27 25	1960.11643	1960.11364	279	
21	2+4 RQ(30, 3)	30 4	1959.80041	1959.80333	-292	225 RQ(16, 15)	16 16	1960.11643	1960.11544	100	
22	225 RQ(26, 18)	26 19	1959.81797	1959.81713	84	2+4 RQ(28, 0)	28 1	1960.11643	1960.11558	86	
23	2+4 PQ(42, 6)	42 5	1959.81797	1959.81860	-63	225 RQ(15, 12)	15 13	1960.11643	1960.11614	29	
24	225 RQ(24, 15)	24 16	1959.82466	1959.82309	157	2+4 RQ(16, 9)	16 10	1960.12354	1960.12192	162	
25	225 RQ(36, 27)	36 28	1959.83594	1959.83424	170	2+4 RQ(19, 6)	19 7	1960.12354	1960.12228	126	
26	2+4 PQ(55, 15)	55 14	1959.83594	1959.83512	82	2+4 PQ(69, 27)	69 26	1960.12354	1960.12326	28	
27	2+4 RQ(24, 9)	24 10	1959.83594	1959.83610	-16	2+4 RQ(23, 3)	23 4	1960.12842	1960.12564	277	
28	2+4 RQ(26, 6)	26 7	1959.84380	1959.84469	-90	2+4 PQ(47, 12)	47 11	1960.12842	1960.12845	-3	
29	2+4 RQ(29, 3)	29 4	1959.85371	1959.85447	-76	2+4 RR(28, 27)	29 28	1960.13273	1960.13444	-171	
30	2+4 RR(27, 27)	28 28	1959.85371	1959.85594	-223	225 RQ(14, 12)	14 13	1960.14415	1960.14259	155	
31	2+4 RQ(33, 0)	33 1	1959.85371W	1959.85680	-309	2+4 RR(26, 18)	27 19	1960.14415	1960.14382	32	
32	225 RQ(28, 21)	28 22	1959.86213	1959.86186	27	2+4 PQ(42, 9)	42 8	1960.14415	1960.14409	6	
33	2+4 PQ(59, 18)	59 17	1959.86213	1959.86279	-66	2+4 PQ(56, 18)	56 17	1960.14415	1960.14526	-111	
34	2+4 RR(25, 18)	26 19	1959.86213	1959.86302	-88	225 RQ(31, 27)	31 28	1960.15130	1960.14855	275	
35	225 RQ(25, 18)	25 19	1959.86213	1959.86395	-182	2+4 RQ(15, 9)	15 10	1960.15130	1960.14983	147	
36	225 RQ(23, 15)	23 16	1959.86213W	1959.86586	-372	2+4 PQ(37, 6)	37 5	1960.15130	1960.15048	81	
37	2+4 RQ(23, 9)	23 10	1959.87853	1959.87790	63	2+4 PQ(32, 3)	32 2	1960.15130	1960.15257	-128	
38	225 RQ(22, 12)	22 13	1959.87853W	1959.88165	-312	2+4 RQ(18, 6)	18 7	1960.15130W	1960.15505	-375	
39	2+4 PQ(50, 12)	50 11	1959.88750	1959.88756	-7	2+4 RQ(27, 0)	27 1	1960.16344	1960.16235	109	
40	2+4 PQ(41, 6)	41 5	1959.88750	1959.88826	-77	225 RQ(26, 24)	26 25	1960.16344	1960.16320	24	
41	2+4 RQ(25, 6)	25 7	1959.88750	1959.88951	-202	2+4 RQ(22, 3)	22 4	1960.16344	1960.16489	-145	
42	225 RQ(35, 27)	35 28	1959.90402W	1959.90078	324	2+4 RQ(14, 9)	14 10	1960.17656	1960.17599	57	
43	2+4 RQ(28, 3)	28 4	1959.90402	1959.90391	11	2+4 PQ(51, 15)	51 14	1960.18494	1960.18403	91	
44	225 RQ(22, 15)	22 16	1959.90402	1959.90684	-283	2+4 PQ(60, 21)	60 20	1960.18494	1960.18477	17	
45	225 RQ(24, 18)	24 19	1959.91104	1959.90897	207	2+4 RQ(17, 6)	17 7	1960.18494	1960.18610	-116	
46	2+4 RQ(32, 0)	32 1	1959.91104	1959.91187	-83	2+4 RQ(21, 3)	21 4	1960.20476	1960.20244	232	
47	225 RQ(27, 21)	27 22	1959.91104	1959.91278	-174	2+4 PQ(46, 12)	46 11	1960.20476	1960.20550	-74	
48	225 RQ(21, 12)	21 13	1959.92106	1959.92042	64	225 RQ(30, 27)	30 28	1960.20476	1960.20589	-113	
49	2+4 PQ(36, 3)	36 2	1959.92106	1959.92177	-71	2+4 PQ(31, 3)	31 2	1960.20476	1960.20612	-136	
50	2+4 RQ(24, 6)	24 7	1959.93331	1959.93261	71	2+4 RQ(26, 0)	26 1	1960.20476	1960.20746	-270	
51	225 RQ(21, 15)	21 16	1959.94728	1959.94606	122	2+4 PQ(36, 6)	36 5	1960.21319	1960.21193	127	
52	2+4 RQ(27, 3)	27 4	1959.95474W	1959.95165	309	2+4 PQ(41, 9)	41 8	1960.21319	1960.21336	-16	
53	225 RQ(23, 18)	23 19	1959.95474	1959.95220	254	2+4 PQ(64, 24)	64 23	1960.21319	1960.21514	-195	
54	225 RQ(30, 24)	30 25	1959.95474	1959.95399	75	2+4 RQ(16, 6)	16 7	1960.21319	1960.21542	-223	
55	2+4 PQ(40, 6)	40 5	1959.95474	1959.95628	-154	2+4 RQ(12, 9)	12 10	1960.22398	1960.22309	89	
56	2+4 RQ(21, 9)	21 10	1959.95474	1959.95631	-157	2+4 PQ(55, 18)	55 17	1960.23700	1960.23621	78	
57	225 RQ(20, 12)	20 13	1959.95474	1959.95744	-270	2+4 RQ(20, 3)	20 4	1960.23700	1960.23828	-129	
58	2+4 RQ(31, 0)	31 1	1959.96667	1959.96529	138	2+4 RQ(25, 0)	25 1	1960.25180	1960.25091	89	
59	225 RQ(34, 27)	34 28	1959.96667	1959.96548	119	2+4 RR(26, 15)	27 16	1960.25180	1960.25191	-11	
60	225 RR(25, 3)	26 4	1959.96667	1959.96615	52	2+4 PQ(30, 3)	30 2	1960.25822	1960.25801	21	
	2+4 PQ(49, 12)	49 11	1959.96667	1959.96948	-281	2+4 RQ(14, 6)	14 7	1960.26959	1960.26890	69	
	2+4 RR(25, 15)	26 16	1959.97139	1959.97155	-16	2+4 PQ(35, 6)	35 5	1960.26959	1960.27172	-213	
	2+4 RQ(23, 6)	23 7	1959.97139	1959.97398	-260	2+4 RR(27, 21)	28 22	1960.26959	1960.27215	-256	
	2+4 PQ(35, 3)	35 2	1959.98278	1959.98196	82	2+4 PQ(45, 12)	45 11	1960.28042	1960.28093	-50	
	225 RQ(20, 15)	20 16	1959.98278	1959.98349	-71	2+4 PQ(40, 9)	40 8	1960.28042	1960.28099	-57	
	2+4 RR(26, 21)	27 22	1959.99492	1959.99265	227	2+4 PQ(59, 21)	59 20	1960.28042	1960.28186	-144	
	225 RQ(19, 12)	19 13	1959.99492	1959.99270	223	2+4 RQ(24, 0)	24 1	1960.29243	1960.29270	-26	
	2+4 RQ(20, 9)	20 10	1959.99492	1959.99291	201	2+4 RQ(13, 6)	13 7	1960.29243	1960.29306	-63	
	225 RQ(22, 18)	22 19	1959.99492	1959.99363	129	2+4 RQ(18, 3)	18 4	1960.30667	1960.30486	181	
	2+4 RQ(26, 3)	26 4	1960.00041	1959.99770	271	225 RR(26, 6)	27 7	1960.30667	1960.30843	-177	
	2+4 PQ(44, 9)	44 8	1960.00041	1960.00066	-25	2+4 RR(26, 12)	27 13	1960.31552	1960.31500	52	
	2+4 PQ(53, 15)	53 14	1960.01327	1960.01280	47	2+4 RQ(12, 6)	12 7	1960.31552	1960.31549	3	
	2+4 RQ(22, 6)	22 7	1960.01327	1960.01364	-37	2+4 PQ(54, 18)	54 17	1960.32583	1960.32555	28	
	2+4 RQ(30, 0)	30 1	1960.01783	1960.01704	79	2+4 RQ(23, 0)	23 1	1960.33314	1960.33282	33	
	225 RQ(19, 15)	19 16	1960.01783	1960.01914	-131	225 RR(26, 9)	27 10	1960.33314	1960.33315	-1	
	2+4 RQ(19, 9)	19 10	1960.02928	1960.02777	151	2+4 RQ(17, 3)	17 4	1960.33314	1960.33559	-245	
	225 RQ(33, 27)	33 28	1960.02928	1960.02834	94	2+4 RQ(11, 6)	11 7	1960.33314W	1960.33620	-306	
	225 RR(25, 6)	26 7	1960.02928	1960.02947	-19	2+4 PQ(39, 9)	39 8	1960.34665	1960.34699	-34	
	2+4 RR(25, 12)	26 13	1960.03605	1960.03511	94	2+4 PQ(49, 15)	49 14	1960.34665	1960.34881	-216	
	2+4 PQ(34, 3)	34 2	1960.04119	1960.04049	70	2+4 RQ(10, 6)	10 7	1960.35725	1960.35519	207	
	2+4 RQ(25, 3)	25 4	1960.04119	1960.04205	-86	2+4 PQ(28, 3)	28 2	1960.35725	1960.35679	46	
	2+4 PP(3, 3)	2 2	1960.05129	1960.05006	122	2+4 RR(28, 24)	29 25	1960.35725	1960.35986	-260	

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2+4 RQ(22, 0)	22 1	1960.37201	1960.37127	74	2+4 PQ(32, 9)	32 8	1960.76224	1960.76306	-82
2+4 RQ(9, 6)	9 7	1960.37201	1960.37245	-44	2+4 PQ(38,12)	38 11	1960.76224	1960.76339	-115
2+4 PQ(33, 6)	33 5	1960.38701	1960.38635	66	2+4 RQ(4, 0)	4 1	1960.77927	1960.77789	138
2+4 RQ(8, 6)	8 7	1960.38701	1960.38798	-97	2+4 PQ(25, 6)	25 5	1960.77927	1960.77877	50
2+4 RQ(15, 3)	15 4	1960.39299	1960.39194	105	2+4 PQ(17, 3)	17 2	1960.77927	1960.78082	-155
2+4 RQ(7, 6)	7 7	1960.40371	1960.40179	192	2+4 RR(28,15)	29 16	1960.80707	1960.80734	-27
2+4 PQ(27, 3)	27 2	1960.40371	1960.40369	2	2+4 PQ(16, 3)	16 2	1960.80707	1960.80934	-227
2+4 RQ(21, 0)	21 1	1960.40910	1960.40806	104	2+4 PQ(31, 9)	31 8	1960.81632	1960.81594	38
2+4 RR(29,27)	30 28	1960.40910	1960.41123	-213	2+4 PQ(24, 6)	24 5	1960.82428W	1960.82037	391
2+4 PQ(38, 9)	38 8	1960.40910	1960.41134	-224	2+4 PQ(37,12)	37 11	1960.82428	1960.82580	-152
2+4 RR(27,18)	28 19	1960.42563	1960.42289	274	2+4 RR(29,21)	30 22	1960.82428	1960.82594	-166
2+4 PQ(43,12)	43 11	1960.42563	1960.42691	-128	2+4 PQ(48,18)	48 17	1960.82428W	1960.82786	-358
2+4 PQ(48,15)	48 14	1960.42563W	1960.42878	-315	2+4 PQ(15, 3)	15 2	1960.83708	1960.83618	90
2+4 RR(30,30)	31 31	1960.42563W	1960.43090	-528	2+4 PQ(23, 6)	23 5	1960.86092	1960.86032	60
2+4 PQ(32, 6)	32 5	1960.44193	1960.44119	73	225 RR(28, 6)	29 7	1960.86092	1960.86092	0
2+4 RQ(13, 3)	13 4	1960.44193	1960.44147	46	2+4 PQ(14, 3)	14 2	1960.86092	1960.86134	-43
2+4 RQ(20, 0)	20 1	1960.44193	1960.44318	-125	2+4 PQ(30, 9)	30 8	1960.86847	1960.86717	130
2+4 PQ(26, 3)	26 2	1960.44918	1960.44891	26	2+4 RR(28,12)	29 13	1960.86847	1960.86944	-97
2+4 PQ(66,27)	66 26	1960.44918	1960.45146	-228	2+4 PQ(42,15)	42 14	1960.87476	1960.87463	13
2+4 RQ(12, 3)	12 4	1960.46409	1960.46368	41	2+4 PQ(13, 3)	13 2	1960.88546	1960.88484	63
2+4 PQ(37, 9)	37 8	1960.47408	1960.47406	2	2+4 PQ(36,12)	36 11	1960.88546	1960.88657	-111
2+4 RQ(19, 0)	19 1	1960.47408	1960.47663	-255	225 RR(28, 9)	29 10	1960.88546	1960.88660	-114
2+4 RQ(11, 3)	11 4	1960.48310	1960.48417	-108	2+4 PQ(22, 6)	22 5	1960.89971	1960.89860	111
2+4 PQ(25, 3)	25 2	1960.49359	1960.49247	112	2+4 PQ(47,18)	47 17	1960.90677	1960.90594	83
2+4 PQ(31, 6)	31 5	1960.49359	1960.49438	-80	2+4 PQ(12, 3)	12 2	1960.90677	1960.90665	12
2+4 RQ(10, 3)	10 4	1960.50717W	1960.50297	420	2+4 RR(30,24)	31 25	1960.90677W	1960.91102	-425
2+4 PQ(47,15)	47 14	1960.50717	1960.50713	4	2+4 PQ(52,21)	52 20	1960.91675	1960.91671	4
2+4 RQ(18, 0)	18 1	1960.50717	1960.50841	-124	2+4 PQ(29, 9)	29 8	1960.91675	1960.91675	0
2+4 RQ(9, 3)	9 4	1960.52066	1960.52005	61	2+4 PQ(11, 3)	11 2	1960.92640	1960.92679	-39
2+4 PQ(61,24)	61 23	1960.52066	1960.52009	57	2+4 PQ(21, 6)	21 5	1960.93544	1960.93522	21
225 RR(27, 3)	28 4	1960.52066	1960.52140	-74	2+4 PQ(70,33)	70 32	1960.93544W	1960.93853	-310
2+4 RR(27,15)	28 16	1960.53405W	1960.53050	354	2+4 PQ(41,15)	41 14	1960.94456	1960.94326	129
2+4 PQ(24, 3)	24 2	1960.53405	1960.53436	-32	2+4 PQ(10, 3)	10 2	1960.94456	1960.94525	-70
2+4 PQ(36, 9)	36 8	1960.53405	1960.53515	-110	2+4 PQ(35,12)	35 11	1960.94456	1960.94572	-116
2+4 RQ(8, 3)	8 4	1960.53405	1960.53543	-138	2+4 RR(31,27)	32 28	1960.96021	1960.95970	51
2+4 PQ(30, 6)	30 5	1960.54706	1960.54592	114	2+4 PQ(9, 3)	9 2	1960.96021	1960.96204	-183
2+4 RQ(7, 3)	7 4	1960.54706	1960.54910	-203	2+4 PQ(20, 6)	20 5	1960.97367W	1960.97018	349
2+4 RR(28,21)	29 22	1960.54706	1960.54991	-285	2+4 RR(29,18)	30 19	1960.97367	1960.97578	-210
2+4 RQ(6, 3)	6 4	1960.56543W	1960.56106	438	2+4 RR(32,30)	33 31	1960.97367	1960.97660	-292
2+4 PQ(41,12)	41 11	1960.56543	1960.56639	-96	2+4 PQ(46,18)	46 17	1960.98277	1960.98241	36
2+4 RQ(16, 0)	16 1	1960.56543	1960.56697	-154	2+4 PQ(7, 3)	7 2	1960.99127	1960.99057	70
2+4 PQ(23, 3)	23 2	1960.57427	1960.57459	-31	2+4 PQ(51,21)	51 20	1961.00255	1961.00099	156
2+4 RQ(4, 3)	4 4	1960.58339W	1960.57985	353	2+4 PQ(6, 3)	6 2	1961.00255	1961.00232	22
2+4 PQ(46,15)	46 14	1960.58339	1960.58387	-48	2+4 PQ(34,12)	34 11	1961.00255	1961.00323	-68
2+4 PQ(51,18)	51 17	1960.58339	1960.58395	-56	2+4 PQ(19, 6)	19 5	1961.00255	1961.00348	-94
225 RR(27, 6)	28 7	1960.58339	1960.58558	-220	2+4 PQ(40,15)	40 14	1961.01082	1961.01028	55
2+4 RR(27,12)	28 13	1960.59422	1960.59311	111	2+4 PQ(27, 9)	27 8	1961.01082	1961.01098	-16
2+4 RQ(15, 0)	15 1	1960.59422	1960.59375	47	2+4 PQ(5, 3)	5 2	1961.01082	1961.01240	-157
2+4 PQ(35, 9)	35 8	1960.59422	1960.59459	-37	2+4 PQ(4, 3)	4 2	1961.02244	1961.02079	165
225 RR(27, 9)	28 10	1960.61205	1960.61077	127	2+4 PQ(18, 6)	18 5	1961.03469	1961.03512	-43
2+4 PQ(22, 3)	22 2	1960.61205	1960.61314	-109	2+4 PQ(26, 9)	26 8	1961.05649	1961.05563	87
2+4 PQ(60,24)	60 23	1960.61903	1960.61856	47	2+4 PQ(45,18)	45 17	1961.05649	1961.05727	-78
2+4 RQ(14, 0)	14 1	1960.61903	1960.61885	18	2+4 PQ(33,12)	33 11	1961.05649	1961.05910	-261
2+4 PQ(40,12)	40 11	1960.63449	1960.63369	80	2+4 PQ(60,27)	60 26	1961.06518	1961.06494	24
2+4 RR(29,24)	30 25	1960.63449	1960.63630	-181	2+4 PQ(17, 6)	17 5	1961.06518	1961.06510	8
2+4 RQ(13, 0)	13 1	1960.64328	1960.64228	100	2+4 PQ(39,15)	39 14	1961.07248W	1961.07567	-319
2+4 PQ(28, 6)	28 5	1960.64328	1960.64403	-75	2+4 RR(29,15)	30 16	1961.08293	1961.08241	52
2+4 PQ(21, 3)	21 2	1960.65140	1960.65002	138	2+4 PQ(50,21)	50 20	1961.08293	1961.08366	-73
2+4 PQ(34, 9)	34 8	1960.65140	1960.65239	-99	2+4 PQ(16, 6)	16 5	1961.09747W	1961.09341	406
2+4 RQ(12, 0)	12 1	1960.66493	1960.66404	88	2+4 PQ(25, 9)	25 8	1961.09747	1961.09862	-115
2+4 PQ(50,18)	50 17	1960.66493	1960.66686	-194	2+4 RR(30,21)	31 22	1961.09747	1961.10024	-277
2+4 RQ(11, 0)	11 1	1960.68491	1960.68413	78	2+4 PQ(32,12)	32 11	1961.11237	1961.11334	-97
2+4 PQ(20, 3)	20 2	1960.68491	1960.68523	-32	2+4 PQ(15, 6)	15 5	1961.12061	1961.12007	54
2+4 RR(30,27)	31 28	1960.68491	1960.68631	-141	2+4 RQ(0, 0)	1 1	1961.12061	1961.12042	18
2+4 PQ(27, 6)	27 5	1960.69155	1960.69060	95	2+4 PQ(64,30)	64 29	1961.12061	1961.12043	18
2+4 PQ(39,12)	39 11	1960.70065	1960.69935	129	2+4 PQ(44,18)	44 17	1961.13057	1961.13051	6
2+4 RR(28,18)	29 19	1960.70065	1960.70021	44	2+4 PQ(38,15)	38 14	1961.14179	1961.13944	235
2+4 RQ(10, 0)	10 1	1960.70065	1960.70254	-189	2+4 PQ(24, 9)	24 8	1961.14179	1961.13997	182
2+4 RR(31,30)	32 31	1960.70065W	1960.70460	-395	2+4 RR(29,12)	30 13	1961.14179	1961.14399	-220
2+4 PQ(33, 9)	33 8	1960.70927	1960.70855	73	2+4 PQ(14, 6)	14 5	1961.14179W	1961.14505	-326
2+4 PQ(19, 3)	19 2	1960.71838	1960.71876	-39	225 RR(29, 9)	30 10	1961.16443W	1961.16062	381
2+4 RQ(9, 0)	9 1	1960.71838	1960.71929	-91	2+4 PQ(49,21)	49 20	1961.16443	1961.16473	-30
2+4 PQ(44,15)	44 14	1960.73381	1960.73249	132	2+4 PQ(31,12)	31 11	1961.16443	1961.16595	-151
2+4 RQ(8, 0)	8 1	1960.73381	1960.73436	-55	2+4 PQ(13, 6)	13 5	1961.16443W	1961.16838	-394
2+4 RQ(7, 0)	7 1	1960.74893	1960.74775	118	2+4 PQ(23, 9)	23 8	1961.18167	1961.17967	200
2+4 PQ(49,18)	49 17	1960.74893	1960.74817	76	2+4 RR(31,24)	32 25	1961.18167	1961.18403	-235
2+4 PQ(18, 3)	18 2	1960.74893	1960.75063	-170	2+4 PQ(12, 6)	12 5	1961.19077	1961.19004	73
2+4 RQ(6, 0)	6 1	1960.76224	1960.75947	277	2+4 PQ(37,15)	37 14	1961.20086	1961.20158	-72

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(I)						(II)						(III)						(IV)						(V)					
2+4	PQ(43,18)	43	17	1961.20086	1961.20214	-128	2+4	PQ(58,30)	58	29	1961.71537	1961.71381	156	2+4	PQ(30,12)	30	11	1961.21720	1961.21691	29	2+4	PQ(35,18)	35	17	1961.71537	1961.71690	-153		
2+4	PQ(22, 9)	22	8	1961.21720	1961.21772	-51	2+4	RR(33,24)	34	25	1961.72449	1961.72488	-40	2+4	PQ(10, 6)	10	5	1961.22963	1961.22836	127	2+4	RR(37,36)	38	37	1961.73179	1961.73043	136		
2+4	RR(32,27)	33	28	1961.22963	1961.23137	-174	2+4	PQ(17,12)	17	11	1961.73179	1961.73028	152	2+4	PQ(48,21)	48	20	1961.24472	1961.24419	52	2+4	PQ(27,15)	27	14	1961.73179	1961.73346	-167		
2+4	PQ(9, 6)	9	5	1961.24472	1961.24502	-31	2+4	PQ(47,24)	47	23	1961.75473	1961.75310	164	2+4	PQ(9, 6)	9	5	1961.24472	1961.24502	-31	2+4	PQ(41,21)	41	20	1961.75473	1961.75535	-61		
2+4	RR(33,30)	34	31	1961.24472	1961.24690	-219	2+4	PQ(16,12)	16	11	1961.75473W	1961.75827	-353	2+4	RR(30,18)	31	19	1961.25088	1961.24960	128	2+4	RR(2, 0)	3	1	1961.76553	1961.76686	-133		
2+4	PQ(8, 6)	8	5	1961.26249	1961.26002	247	2+4	RR(36,33)	37	34	1961.76553	1961.76794	-241	2+4	PQ(8, 6)	8	5	1961.26249	1961.26002	247	2+4	RR(34,27)	35	28	1961.76553W	1961.76961	-408		
2+4	PQ(36,15)	36	14	1961.26249	1961.26209	39	2+4	PQ(34,18)	34	17	1961.77566	1961.77396	170	2+4	PQ(53,24)	53	23	1961.26249	1961.26308	-59	2+4	PQ(26,15)	26	14	1961.77566	1961.77768	-202		
2+4	RR(42,18)	42	17	1961.27281	1961.27215	66	2+4	PQ(26,15)	26	14	1961.77566	1961.77768	-202	2+4	PQ(42,18)	42	17	1961.27281	1961.27336	-54	2+4	RR(35,30)	36	31	1961.77981	1961.78243	-262		
2+4	PQ(7, 6)	7	5	1961.27281	1961.27336	-54	2+4	RR(35,30)	36	31	1961.77981	1961.78243	-262	2+4	PQ(6, 6)	6	5	1961.28799	1961.28502	297	2+4	PQ(15,12)	15	11	1961.77981W	1961.78462	-481		
2+4	PQ(6, 6)	6	5	1961.28799	1961.28502	297	2+4	PQ(15,12)	15	11	1961.77981W	1961.78462	-481	2+4	PQ(20, 9)	20	8	1961.28799	1961.28887	-88	2+4	RR(32,18)	33	19	1961.79210	1961.79200	11		
2+4	PQ(28,12)	28	11	1961.31393	1961.31394	-1	2+4	RR(32,18)	33	19	1961.79210	1961.79200	11	2+4	PQ(28,12)	28	11	1961.31393	1961.31394	-1	2+4	PQ(62,33)	62	32	1961.79210	1961.79209	2		
2+4	PQ(35,15)	35	14	1961.32157	1961.32098	59	2+4	PQ(62,33)	62	32	1961.79210	1961.79209	2	2+4	PQ(35,15)	35	14	1961.32157	1961.32098	59	2+4	PQ(52,27)	52	26	1961.79210	1961.79366	-156		
2+4	PQ(19, 9)	19	8	1961.32157	1961.32196	-39	2+4	PQ(52,27)	52	26	1961.79210	1961.79366	-156	2+4	PQ(19, 9)	19	8	1961.32157	1961.32196	-39	2+4	PQ(57,30)	57	29	1961.80817	1961.80714	103		
2+4	PQ(47,21)	47	20	1961.32157	1961.32205	-48	2+4	PQ(57,30)	57	29	1961.80817	1961.80714	103	2+4	PQ(47,21)	47	20	1961.32157	1961.32205	-48	2+4	PQ(14,12)	14	11	1961.80817	1961.80932	-115		
2+4	PQ(41,18)	41	17	1961.34005	1961.34054	-49	2+4	PQ(14,12)	14	11	1961.80817	1961.80932	-115	2+4	PQ(41,18)	41	17	1961.34005	1961.34054	-49	2+4	PQ(25,15)	25	14	1961.82029	1961.82027	2		
2+4	PQ(52,24)	52	23	1961.34958	1961.34876	82	2+4	PQ(25,15)	25	14	1961.82029	1961.82027	2	2+4	PQ(52,24)	52	23	1961.34958	1961.34876	82	2+4	PQ(40,21)	40	20	1961.82029	1961.82192	-163		
2+4	PQ(57,27)	57	26	1961.34958	1961.35018	-60	2+4	PQ(40,21)	40	20	1961.82029	1961.82192	-163	2+4	PQ(57,27)	57	26	1961.34958	1961.35018	-60	2+4	PQ(46,24)	46	23	1961.82935	1961.82915	19		
2+4	PQ(18, 9)	18	8	1961.35554	1961.35341	213	2+4	PQ(46,24)	46	23	1961.82935	1961.82915	19	2+4	PQ(18, 9)	18	8	1961.35554	1961.35341	213	2+4	PQ(33,18)	33	17	1961.82935	1961.82939	-4		
2+4	RR(30,15)	31	16	1961.35554	1961.35572	-17	2+4	PQ(33,18)	33	17	1961.82935	1961.82939	-4	2+4	RR(30,15)	31	16	1961.35554	1961.35572	-17	2+4	PQ(13,12)	13	11	1961.82935W	1961.83238	-303		
2+4	PQ(27,12)	27	11	1961.36087	1961.35999	88	2+4	PQ(13,12)	13	11	1961.82935W	1961.83238	-303	2+4	PQ(27,12)	27	11	1961.36087	1961.35999	88	2+4	PQ(12,12)	12	11	1961.85080	1961.85379	-299		
2+4	RR(31,21)	32	22	1961.37152	1961.37281	-129	2+4	PQ(12,12)	12	11	1961.85080	1961.85379	-299	2+4	RR(31,21)	32	22	1961.37152	1961.37281	-129	2+4	PQ(24,15)	24	14	1961.86119	1961.86122			

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2+4	PQ(33,21)	33	20	1962.24044	1962.24270	-226		2+4	PQ(56,36)	56	35	1962.84262	1962.84099	163					
2+4	PQ(52,30)	52	29	1962.25055	1962.24984	71		2+4	RR(6, 3)	7	4	1962.84262	1962.84151	111					
2+4	PQ(40,24)	40	23	1962.25055	1962.25170	-115		2+4	RR(36,18)	37	19	1962.85499	1962.85575	-76					
2+4	RR(39,36)	40	37	1962.25055	1962.25354	-299		2+4	PQ(44,30)	44	29	1962.87468	1962.87507	-39					
2+4	PQ(24,18)	24	17	1962.25722	1962.25515	207		2+4	PQ(50,33)	50	32	1962.88285	1962.88164	122					
2+4	RR(35,24)	36	25	1962.25722	1962.25885	-163		2+4	PQ(37,27)	37	26	1962.88285	1962.88381	-96					
2+4	PQ(46,27)	46	26	1962.27289	1962.27304	-16		2+4	PQ(28,24)	28	23	1962.92234	1962.92272	-39					
2+4	PQ(57,33)	57	32	1962.27289	1962.27394	-105		2+4	PQ(55,36)	55	35	1962.93162	1962.93088	74					
2+4	RR(38,33)	39	34	1962.29244	1962.29391	-146		2+4	PQ(36,27)	36	26	1962.94499	1962.94364	135					
2+4	PQ(23,18)	23	17	1962.29244	1962.29432	-187		2+4	RR(36,15)	37	16	1962.95952	1962.95841	111					
2+4	PQ(32,21)	32	20	1962.29887	1962.29634	253		2+4	RR(43,39)	44	40	1962.95952	1962.96155	-203					
2+4	RR(36,27)	37	28	1962.29887	1962.30100	-214		2+4	PQ(49,33)	49	32	1962.96531W	1962.96207	325					
2+4	RR(37,30)	38	31	1962.30960	1962.31116	-156		2+4	PR(5, 3)	6	2	1962.96531	1962.96726	-195					
2+4	PQ(39,24)	39	23	1962.31699	1962.31650	49		2+4	PQ(27,24)	27	23	1962.97071	1962.96814	257					
2+4	RR(34,18)	35	19	1962.32818	1962.32738	79		2+4	RR(37,21)	38	22	1962.97071	1962.97174	-103					
2+4	PQ(22,18)	22	17	1962.33363	1962.33186	177		2+4	PQ(35,27)	35	26	1963.00102	1963.00185	-83					
2+4	PQ(51,30)	51	29	1962.33363	1962.33359	3		2+4	RR(7, 6)	8	7	1963.00915	1963.00784	131					
2+4	PQ(45,27)	45	26	1962.34764	1962.34733	31		2+4	PQ(26,24)	26	23	1963.00915	1963.01194	-279					
2+4	PQ(31,21)	31	20	1962.34764	1962.34836	-72		2+4	PQ(42,30)	42	29	1963.01664	1963.01536	128					
2+4	PQ(61,36)	61	35	1962.36873	1962.36769	104		2+4	RR(36,12)	37	13	1963.01664	1963.01585	79					
2+4	PQ(21,18)	21	17	1962.36873	1962.36777	95		2+4	RR(42,36)	43	37	1963.02575	1963.02558	17					
2+4	PQ(38,24)	38	23	1962.37974	1962.37968	6		2+4	RR(6, 0)	7	1	1963.03965	1963.03915	50					
2+4	PQ(30,21)	30	20	1962.39916	1962.39876	39		2+4	PQ(59,39)	59	38	1963.04672	1963.04542	130					
2+4	PQ(20,18)	20	17	1962.39916	1962.40206	-290		2+4	RR(38,24)	39	25	1963.04672	1963.04686	-14					
2+4	PQ(50,30)	50	29	1962.41798	1962.41575	223		2+4	PQ(25,24)	25	23	1963.05608	1963.05412	196					
2+4	RR(34,15)	35	16	1962.43216	1962.43126	90		2+4	RR(41,33)	42	34	1963.06955	1963.07019	-64					
2+4	PQ(19,18)	19	17	1962.43216	1962.43471	-255		2+4	PQ(41,30)	41	29	1963.08467	1963.08310	157					
2+4	PQ(65,39)	65	38	1962.44609	1962.44473	136		2+4	RR(39,27)	40	28	1963.08467	1963.08526	-59					
2+4	RR(35,21)	36	22	1962.44609	1962.44572	37		2+4	RR(40,30)	41	31	1963.09044	1963.09151	-107					
2+4	PQ(29,21)	29	20	1962.44609	1962.44754	-145		2+4	PQ(33,27)	33	26	1963.11624	1963.11344	279					
2+4	PQ(55,33)	55	32	1962.45665	1962.45554	111		2+4	RR(37,18)	38	19	1963.11624	1963.11730	-106					
2+4	PQ(60,36)	60	35	1962.46529	1962.46553	-23		2+4	PQ(58,39)	58	38	1963.13996	1963.13998	-2					
2+4	PQ(18,18)	18	17	1962.46529	1962.46574	-44		2+4	PQ(40,30)	40	29	1963.14966	1963.14923	43					
2+4	RR(34,12)	35	13	1962.49140	1962.48997	143		2+4	RR(7, 3)	8	4	1963.15810	1963.15530	280					
2+4	PQ(43,27)	43	26	1962.49140	1962.49109	31		2+4	PQ(32,27)	32	26	1963.16679	1963.16682	-3					
2+4	PQ(28,21)	28	20	1962.49140W	1962.49470	-330		2+4	PQ(52,36)	52	35	1963.19213	1963.19099	114					
2+4	PQ(36,24)	36	23	1962.50186	1962.50120	66		2+4	RR(44,39)	45	40	1963.21806W	1963.21408	397					
225	RR(34, 9)	35	10	1962.50186	1962.50374	-187		2+4	PQ(31,27)	31	26	1963.21806	1963.21859	-54					
2+4	RR(40,36)	41	37	1962.51049	1962.51257	-208		2+4	RR(37,15)	38	16	1963.21806	1963.21932	-126					
2+4	RR(36,24)	37	25	1962.52339	1962.52325	15		2+4	RR(38,21)	39	22	1963.23107	1963.23214	-106					
2+4	RR(5, 3)	6	4	1962.52339	1962.52599	-260		2+4	PQ(57,39)	57	38	1963.23107	1963.23295	-188					
2+4	PQ(27,21)	27	20	1962.54109	1962.54024	85		2+4	PQ(45,33)	45	32	1963.26864	1963.26781	83					
2+4	RR(39,33)	40	34	1962.55217	1962.55436	-219		2+4	PQ(30,27)	30	26	1963.26864	1963.26875	-11					
2+4	PQ(35,24)	35	23	1962.56112	1962.55954	158		2+4	RR(37,12)	38	13	1963.27802	1963.27611	191					
2+4	PQ(42,27)	42	26	1962.56112	1962.56056	56		2+4	PQ(38,30)	38	29	1963.27802	1963.27669	133					
2+4	PQ(59,36)	59	35	1962.56112	1962.56178	-66		2+4	RR(43,36)	44	37	1963.27802	1963.27956	-154					
2+4	RR(37,27)	38	28	1962.56112W	1962.56414	-302		225	RR(37, 9)	38	10	1963.28922	1963.28795	128					
2+4	RR(38,30)	39	31	1962.57192	1962.57298	-106		2+4	RR(39,24)	40	25	1963.30543	1963.30608	-65					
2+4	PQ(26,21)	26	20	1962.58466	1962.58416	50	</												

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)
2+4 PQ(40,33)	40	32	1963.61496	1963.61399	97	2+4 RR(50,39)	51	40	1964.69520	1964.69406	115
2+4 PQ(32,30)	32	29	1963.62114	1963.62049	65	2+4 RR(12, 3)	13	4	1964.69520W	1964.69854	-334
2+4 RR(9, 6)	10	7	1963.63127	1963.62995	132	225 RR(13,12)	14	13	1964.72705	1964.72692	14
2+4 RR(39,18)	40	19	1963.63662	1963.63511	151	2+4 RR(43,15)	44	16	1964.74698	1964.74742	-44
2+4 RR(8, 0)	9	1	1963.66504	1963.66499	5	2+4 RR(44,21)	45	22	1964.75889	1964.75779	109
2+4 PQ(52,39)	52	38	1963.67543	1963.67396	147	2+4 RR(13, 9)	14	10	1964.75889	1964.76038	-149
2+4 PQ(30,30)	30	29	1963.72221	1963.72222	0	225 RR(43, 6)	44	7	1964.77280	1964.77258	22
2+4 RR(39,15)	40	16	1963.73732	1963.73581	151	2+4 RR(43,12)	44	13	1964.80082	1964.79992	90
2+4 PQ(38,33)	38	32	1963.74118	1963.74124	-6	225 RR(43, 9)	44	10	1964.81131W	1964.80749	382
2+4 PQ(45,36)	45	35	1963.74118	1963.74210	-92	2+4 PR(10, 6)	11	5	1964.81131	1964.81223	-92
2+4 RR(40,21)	41	22	1963.74789	1963.74769	20	2+4 RR(48,33)	49	34	1964.82406	1964.82220	186
2+4 PQ(51,39)	51	38	1963.75938	1963.75738	200	2+4 RR(45,24)	46	25	1964.82406	1964.82495	-88
2+4 RR(9, 3)	10	4	1963.77211W	1963.77775	-564	2+4 PR(11, 3)	12	2	1964.83670	1964.83630	39
2+4 RR(45,36)	46	37	1963.78447	1963.78247	200	2+4 RR(47,30)	48	31	1964.85368	1964.85264	104
2+4 RR(39,12)	40	13	1963.79189	1963.79123	66	2+4 RR(13, 6)	14	7	1964.85368	1964.85335	33
225 RR(39, 9)	40	10	1963.80361	1963.80171	190	2+4 RR(46,27)	47	28	1964.85368	1964.85506	-138
2+4 PQ(37,33)	37	32	1963.80361	1963.80246	115	2+4 RR(12, 0)	13	1	1964.89882	1964.89604	278
2+4 PQ(44,36)	44	35	1963.81778W	1963.81445	333	2+4 RR(44,18)	45	19	1964.89882	1964.89875	7
2+4 RR(41,24)	42	25	1963.81778	1963.81931	-153	2+4 RR(44,15)	45	16	1964.99707	1964.99586	121
2+4 RR(44,33)	45	34	1963.83136	1963.83123	13	2+4 RR(13, 3)	14	4	1965.00281	1965.00203	78
2+4 RR(10, 9)	11	10	1963.84716	1963.84619	98	2+4 RR(45,21)	46	22	1965.00281W	1965.00593	-313
2+4 RR(42,27)	43	28	1963.85477	1963.85408	69	2+4 RR(50,36)	51	37	1965.01313	1965.01022	290
2+4 RR(43,30)	44	31	1963.85477	1963.85653	-176	225 RR(14,12)	15	13	1965.02800	1965.02783	16
2+4 RR(40,18)	41	19	1963.89162	1963.89137	25	2+4 RR(44,12)	45	13	1965.04747	1965.04759	-12
2+4 PQ(49,39)	49	38	1963.92120	1963.91946	175	225 RR(44, 9)	45	10	1965.05732	1965.05439	293
2+4 PQ(35,33)	35	32	1963.92120	1963.92009	111	2+4 RR(14, 9)	15	10	1965.06284	1965.06160	124
2+4 RR(10, 6)	11	7	1963.93776	1963.93840	-64	2+4 RR(49,33)	50	34	1965.06284	1965.06570	-286
2+4 PQ(42,36)	42	35	1963.95681	1963.95433	248	2+4 RR(46,24)	47	25	1965.07349	1965.07201	149
2+4 RR(47,39)	48	40	1963.95681W	1963.96162	-481	2+4 RR(48,30)	49	31	1965.09937	1965.09738	199
2+4 RR(9, 0)	10	1	1963.97639	1963.97533	106	2+4 RR(47,27)	48	28	1965.09937	1965.10100	-162
2+4 PQ(34,33)	34	32	1963.97639	1963.97650	-11	2+4 RR(45,18)	46	19	1965.14667	1965.14617	50
2+4 RR(40,15)	41	16	1963.99260	1963.99138	122	2+4 RR(14, 6)	15	7	1965.15655	1965.15485	170
2+4 RR(41,21)	42	22	1964.00149	1964.00284	-135	2+4 RR(13, 0)	14	1	1965.19903	1965.19949	-46
2+4 PQ(41,36)	41	35	1964.02279	1964.02188	92	2+4 RR(45,15)	46	16	1965.24342	1965.24252	90
225 RR(40, 6)	41	7	1964.02279	1964.02309	-29	2+4 RR(51,36)	52	37	1965.25394W	1965.25070	323
2+4 RR(46,36)	47	37	1964.03418	1964.03140	279	2+4 RR(46,21)	47	22	1965.25394	1965.25232	162
2+4 RR(40,12)	41	13	1964.04714	1964.04610	104	2+4 RR(45,12)	46	13	1965.29477	1965.29346	131
225 RR(40, 9)	41	10	1964.05694	1964.05587	106	2+4 RR(14, 3)	15	4	1965.30348	1965.30380	-32
2+4 RR(42,24)	43	25	1964.07338	1964.07333	5	2+4 RR(47,24)	48	25	1965.31752	1965.31732	20
2+4 PQ(47,39)	47	38	1964.07338	1964.07515	-177	225 RR(15,12)	16	13	1965.32703	1965.32698	5
2+4 RR(45,33)	46	34	1964.08246	1964.08152	94	2+4 RR(49,30)	50	31	1965.34260	1965.34041	218
2+4 RR(10, 3)	11	4	1964.08836	1964.08640	196	2+4 RR(48,27)	49	28	1965.34260	1965.34520	-260
2+4 PQ(40,36)	40	35	1964.08836	1964.08782	54	225 RR(15,15)	16	16	1965.35432	1965.35439	-7
2+4 RR(43,27)	44	28	1964.10727	1964.10691	36	2+4 RR(15, 9)	16	10	1965.36233	1965.36106	127
2+4 RR(44,30)	45	31	1964.10727	1964.10812	-85	2+4 RR(46,18)	47	19	1965.39146	1965.39181	-35
2+4 RR(41,18)	42	19	1964.14422	1964.14587	-165	2+4 PR(12, 6)	13	5	1965.42564	1965.42542	22
2+4 PQ(46,39)	46	38	1964.15260	1964.15061	199	2+4 PR(13, 3)	14	2	1965.44420	1965.44582	-162
2+4 PQ(39,36)	39	35	1964.15260	1964.15216	43	2+4 RR(15, 6)	16	7	1965.45493	1965.45462	31
2+4 RR(11, 9)	12	10	1964.15260	1964.15267	-7	2+4 RR(47,21)	48	22	1965.49482	1965.49694	-211
2+4 PR(9, 3)	10	2	1964.21904	1964.22004	-100	2+4 RR(14, 0)	15	1	1965.50265	1965.50123	142
2+4 RR(11, 6)	12	7	1964.24559	1964.24512	47	2+4 RR(51,33)	52	34	1965.54828	1965.54757	71
2+4 RR(41,15)	42	16	1964.24559	1964.24518	41	2+4 RR(48,24)	49	25	1965.56115	1965.56089	26
2+4 RR(42,21)	43	22	1964.25519	1964.25625	-105	2+4 RR(50,30)	51	31	1965.58327	1965.58172	155
2+4 RR(47,36)	48	37	1964.28146	1964.27864	283	2+4 RR(49,27)	50	28	1965.58860	1965.58766	94
2+4 RR(10, 0)	11	1	1964.28146	1964.28395	-249	2+4 RR(15, 3)	16	4	1965.60440	1965.60385	55
2+4 RR(41,12)	42	13	1964.29969	1964.29917	51	225 RR(16,12)	17	13	1965.62489	1965.62434	55
225 RR(41, 9)	42	10	1964.31025	1964.30823	202	2+4 RR(47,18)	48	19	1965.63657	1965.63568	89
2+4 RR(43,24)	44	25	1964.32907W	1964.32561	346	225 RR(16,15)	17	16	1965.65209	1965.65141	68
2+4 RR(46,33)	47	34	1964.32907	1964.33011	-104	2+4 RR(16, 9)	17	10	1965.66018	1965.65877	141
2+4 RR(45,30)	46	31	1964.35780	1964.35801	-21	2+4 PR(13, 6)	14	5	1965.73161	1965.72949	212
2+4 RR(44,27)	45	28	1964.35780	1964.35802	-22	2+4 RR(47,15)	48	16	1965.73161	1965.73046	115
2+4 PQ(43,39)	43	38	1964.36851	1964.36739	112	2+4 RR(48,21)	49	22	1965.74048	1965.73979	69
2+4 RR(11, 3)	12	4	1964.39442	1964.39333	109	2+4 PR(12, 9)	13	8	1965.74048	1965.74284	-236
2+4 RR(42,18)	43	19	1964.39937	1964.39860	77	2+4 PR(14, 3)	15	2	1965.74777	1965.74804	-27
225 RR(12,12)	13	13	1964.42482	1964.42422	60	2+4 RR(16, 6)	17	7	1965.75279	1965.75265	14
2+4 RR(12, 9)	13	10	1964.45815	1964.45740	75	2+4 RR(52,33)	53	34	1965.78889	1965.78595	294
2+4 RR(42,15)	43	16	1964.49679	1964.49719	-40	2+4 RR(15, 0)	16	1	1965.80294	1965.80124	170
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(I)		(II)		(III)		(IV)		(V)		(I)		(II)		(III)		(IV)		(V)	
2+4	RR(50,24)	51	25	1966.04437	1966.04277	160				2+4	RR(58,30)	59	31	1967.44767	1967.45006	-239			
2+4	PR(13, 9)	14	8	1966.04437	1966.04706	-269				2+4	RR(57,27)	58	28	1967.46642	1967.46471	171			
2+4	PR(15, 3)	16	2	1966.04925	1966.04857	68				225	RR(22,18)	23	19	1967.48087	1967.48195	-107			
2+4	RR(17, 6)	18	7	1966.04925	1966.04894	32				2+4	RR(22, 6)	23	7	1967.50453	1967.50426	28			
2+4	RR(52,30)	53	31	1966.06048	1966.05918	130				2+4	PR(19, 6)	20	5	1967.51990	1967.51869	121			
2+4	RR(51,27)	52	28	1966.06816	1966.06739	77				2+4	PR(20, 3)	21	2	1967.52515	1967.52585	-70			
2+4	RR(16, 0)	17	1	1966.09931	1966.09953	-23				2+4	PR(18, 9)	19	8	1967.54307	1967.54310	-3			
2+4	RR(49,18)	50	19	1966.11814	1966.11808	6				2+4	RR(21, 0)	22	1	1967.56653	1967.56510	143			
2+4	RR(17, 3)	18	4	1966.20058	1966.19878	180				2+4	PR(17,12)	18	11	1967.59529	1967.59437	92			
2+4	RR(49,15)	50	16	1966.21335	1966.21122	213				225	RR(22,21)	23	22	1967.62827	1967.62786	42			
225	RR(18,12)	19	13	1966.21335	1966.21374	-39				2+4	RR(22, 3)	23	4	1967.65614	1967.65597	17			
2+4	RR(50,21)	51	22	1966.22134	1966.22021	114				225	RR(23,12)	24	13	1967.65614	1967.65611	3			
225	RR(18,15)	19	16	1966.24038	1966.24007	31				225	RR(23,15)	24	16	1967.67921	1967.68022	-101			
2+4	RR(18, 9)	19	10	1966.24957	1966.24891	66				2+4	RR(23, 9)	24	10	1967.69302	1967.69350	-48			
2+4	RR(51,24)	52	25	1966.28243	1966.28108	135				225	RR(23,18)	24	19	1967.76543	1967.76591	-48			
2+4	RR(53,30)	54	31	1966.29639	1966.29532	106				2+4	RR(23, 6)	24	7	1967.79001	1967.79009	-8			
2+4	RR(52,27)	53	28	1966.30477	1966.30465	12				2+4	PR(21, 3)	22	2	1967.81515	1967.81622	-107			
225	RR(18,18)	19	19	1966.32779	1966.32792	-13				2+4	RR(22, 0)	23	1	1967.85401	1967.85303	98			
2+4	RR(18, 6)	19	7	1966.34562	1966.34348	213				2+4	PR(18,12)	19	11	1967.89116	1967.89040	76			
2+4	PR(16, 3)	17	2	1966.34562	1966.34741	-179				225	RR(23,21)	24	22	1967.91172	1967.91137	35			
2+4	RR(17, 0)	18	1	1966.39616	1966.39610	7				225	RR(24,12)	25	13	1967.94050	1967.93925	124			
2+4	RR(50,15)	51	16	1966.45134	1966.44892	242				2+4	RR(23, 3)	24	4	1967.94050	1967.94223	-174			
2+4	RR(51,21)	52	22	1966.45780	1966.45776	4				225	RR(24,15)	25	16	1967.96364	1967.96285	79			
2+4	RR(55,33)	56	34	1966.49363	1966.49083	280				2+4	RR(24, 9)	25	10	1967.97733	1967.97714	19			
2+4	RR(18, 3)	19	4	1966.49363	1966.49367	-3				225	RR(24,18)	25	19	1968.04634	1968.04805	-171			
225	RR(19,12)	20	13	1966.50556	1966.50577	-21				2+4	RR(24, 6)	25	7	1968.07441	1968.07418	23			
2+4	RR(52,24)	53	25	1966.51730	1966.51763	-33				2+4	PR(22, 3)	23	2	1968.10454	1968.10491	-37			
2+4	RR(54,30)	55	31	1966.53095	1966.52974	122				2+4	RR(23, 0)	24	1	1968.14007	1968.13924	83			
225	RR(19,15)	20	16	1966.53095	1966.53169	-74				225	RR(24,21)	25	22	1968.19344	1968.19304	40			
2+4	RR(53,27)	54	28	1966.54091	1966.54016	75				225	RR(25,12)	26	13	1968.22083	1968.22061	22			
2+4	RR(19, 9)	20	10	1966.54091	1966.54134	-43				2+4	RR(24, 3)	25	4	1968.22784	1968.22677	107			
225	RR(19,18)	20	19	1966.61880	1966.61915	-35				225	RR(25,15)	26	16	1968.24424	1968.24369	56			
2+4	PR(16, 6)	17	5	1966.63208	1966.63165	43				2+4	RR(25, 9)	26	10	1968.25906	1968.25903	3			
2+4	RR(19, 6)	20	7	1966.63649	1966.63629	20				225	RR(25,18)	26	19	1968.32768	1968.32837	-70			
2+4	PR(17, 3)	18	2	1966.64422	1966.64456	-34				2+4	RR(25, 6)	26	7	1968.35751	1968.35653	99			
2+4	PR(15, 9)	16	8	1966.65065	1966.65048	16				2+4	PR(22, 6)	23	5	1968.39336	1968.39059	277			
2+4	RR(18, 0)	19	1	1966.69261	1966.69093	168				2+4	PR(23, 3)	24	2	1968.39336	1968.39190	146			
2+4	RR(52,21)	53	22	1966.69261	1966.69354	-93				225	RR(24,24)	25	25	1968.39336	1968.39453	-116			
2+4	RR(53,24)	54	25	1966.75287	1966.75242	44				2+4	PR(21, 9)	22	8	1968.42350	1968.42068	282			
2+4	RR(55,30)	56	31	1966.76388	1966.76242	146				2+4	RR(24, 0)	25	1	1968.42350	1968.42372	-22			
2+4	RR(54,27)	55	28	1966.77437	1966.77392	44				225	RR(25,21)	26	22	1968.47345	1968.47288	57			
2+4	RR(19, 3)	20	4	1966.78607	1966.78683	-76				225	RR(26,12)	27	13	1968.50038	1968.50019	19			
225	RR(20,12)	21	13	1966.79661	1966.79603	59				2+4	RR(25, 3)	26	4	1968.50964	1968.50959	5			
225	RR(20,15)	21	16	1966.82089	1966.82152	-63				225	RR(26,15)	27	16	1968.52195	1968.52272	-77			
2+4	RR(20, 9)	21	10	1966.83099	1966.83202	-103				2+4	RR(26, 9)	27	10	1968.53939	1968.53916	23			
225	RR(20,18)	21	19	1966.90771	1966.90857	-86				225	RR(26,18)	27	19	1968.60616	1968.60687	-72			
2+4	RR(20, 6)	21	7	1966.92827	1966.92736	92				2+4	RR(26, 6)	27							

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)		
225	RR(28, 21)	29	22	1969.30061	1969.30136	-75	2+4	RR(33, 3)	34	4	1970.71072	1970.70998	74
225	RR(29, 12)	30	13	1969.32798	1969.32825	-26	2+4	RR(34, 9)	35	10	1970.71718	1970.71723	-5
2+4	PR(23, 12)	24	11	1969.34818	1969.34559	259	2+4	PR(28, 12)	29	11	1970.75808	1970.75914	-106
2+4	RR(28, 3)	29	4	1969.34818	1969.34768	50	225	RR(34, 18)	35	19	1970.76839	1970.76940	-101
225	RR(29, 15)	30	16	1969.34818	1969.34903	-85	2+4	RR(34, 6)	35	7	1970.81868	1970.81870	-2
2+4	RR(29, 9)	30	10	1969.36911	1969.36904	7	225	RR(32, 27)	33	28	1970.82829	1970.82768	60
2+4	PR(22, 15)	23	14	1969.43080	1969.43047	34	225	RR(33, 24)	34	25	1970.84233	1970.84220	13
225	RR(29, 18)	30	19	1969.43080	1969.43147	-66	225	RR(31, 30)	32	31	1970.86130	1970.86031	99
2+4	RR(29, 6)	30	7	1969.46867	1969.46840	27	2+4	PR(32, 3)	33	2	1970.89845	1970.89858	-13
225	RR(27, 27)	28	28	1969.48069	1969.47958	111	2+4	RR(33, 0)	34	1	1970.90728	1970.90626	102
225	RR(28, 24)	29	25	1969.50117	1969.50094	23	225	RR(34, 21)	35	22	1970.90728	1970.90868	-141
2+4	PR(27, 3)	28	2	1969.52292	1969.52292	0	2+4	PR(31, 6)	32	5	1970.91588	1970.91539	49
2+4	PR(26, 6)	27	5	1969.53010	1969.52957	53	225	RR(35, 12)	36	13	1970.93638	1970.93633	5
2+4	RR(28, 0)	29	1	1969.54415	1969.54436	-21	225	RR(35, 15)	36	16	1970.95374	1970.95306	68
2+4	PR(25, 9)	26	8	1969.56392W	1969.56736	-345	2+4	PR(30, 9)	31	8	1970.96345	1970.96304	40
225	RR(29, 21)	30	22	1969.57439	1969.57384	55	2+4	PR(26, 18)	27	17	1970.96345	1970.96621	-277
225	RR(30, 12)	31	13	1969.60093	1969.60071	22	2+4	RR(34, 3)	35	4	1970.97800	1970.97727	74
225	RR(30, 15)	31	16	1969.62175	1969.62086	89	2+4	RR(35, 9)	36	10	1970.98290	1970.98166	124
2+4	RR(29, 3)	30	4	1969.62175	1969.62359	-184	225	RR(35, 18)	36	19	1971.03043	1971.03153	-110
2+4	PR(24, 12)	25	11	1969.63122	1969.63164	-41	2+4	PR(29, 12)	30	11	1971.03754	1971.03685	68
2+4	RR(30, 9)	31	10	1969.64234	1969.64216	18	2+4	RR(35, 6)	36	7	1971.08237	1971.08344	-107
225	RR(30, 18)	31	19	1969.70144	1969.70269	-125	225	RR(33, 27)	34	28	1971.09230	1971.09168	62
2+4	PR(23, 15)	24	14	1969.71861	1969.71834	26	225	RR(34, 24)	35	25	1971.10484	1971.10488	-4
2+4	RR(30, 6)	31	7	1969.74143	1969.74199	-56	225	RR(32, 30)	33	31	1971.12641	1971.12571	69
225	RR(28, 27)	29	28	1969.75302	1969.75295	7	2+4	PR(28, 15)	29	14	1971.13301	1971.13284	17
225	RR(29, 24)	30	25	1969.77249	1969.77291	-42	2+4	PR(33, 3)	34	2	1971.16986	1971.16863	123
2+4	PR(28, 3)	29	2	1969.80189	1969.80144	45	225	RR(35, 21)	36	22	1971.16986	1971.17014	-28
2+4	PR(27, 6)	28	5	1969.81016	1969.81010	6	2+4	RR(34, 0)	35	1	1971.16986W	1971.17345	-359
2+4	RR(29, 0)	30	1	1969.82048	1969.82019	29	2+4	PR(32, 6)	33	5	1971.18766	1971.18750	15
225	RR(30, 21)	31	22	1969.84511	1969.84449	62	225	RR(36, 12)	37	13	1971.19764	1971.19812	-48
2+4	PR(26, 9)	27	8	1969.85097	1969.84985	112	225	RR(36, 15)	37	16	1971.21492	1971.21410	83
225	RR(31, 12)	32	13	1969.87157	1969.87139	19	2+4	RR(35, 3)	36	4	1971.24384	1971.24282	102
225	RR(31, 15)	32	16	1969.89159	1969.89090	69	2+4	RR(36, 9)	37	10	1971.24384	1971.24438	-54
2+4	RR(30, 3)	31	4	1969.89787	1969.89778	10	225	RR(36, 18)	37	19	1971.29056	1971.29184	-128
2+4	RR(31, 9)	32	10	1969.91378	1969.91354	24	2+4	PR(30, 12)	31	11	1971.31197	1971.31289	-92
2+4	PR(25, 12)	26	11	1969.91378	1969.91601	-223	2+4	RR(36, 6)	37	7	1971.34591	1971.34640	-49
225	RR(31, 18)	32	19	1969.97077	1969.97210	-132	225	RR(34, 27)	35	28	1971.35439	1971.35381	57
2+4	RR(31, 6)	32	7	1970.01346	1970.01382	-36	225	RR(35, 24)	36	25	1971.36522	1971.36571	-49
225	RR(29, 27)	30	28	1970.02436	1970.02444	-8	225	RR(33, 30)	34	31	1971.38898	1971.38923	-25
225	RR(30, 24)	31	25	1970.04366	1970.04301	64	2+4	PR(29, 15)	30	14	1971.41027	1971.41076	-49
2+4	PR(29, 3)	30	2	1970.07807	1970.07827	-20	225	RR(36, 21)	37	22	1971.42876	1971.42975	-99
2+4	PR(28, 6)	29	5	1970.08976	1970.08895	81	2+4	PR(34, 3)	35	2	1971.43799	1971.43698	101
2+4	RR(30, 0)	31	1	1970.09474	1970.09430	43	2+4	RR(35, 0)	36	1	1971.43799	1971.43891	-92
225	RR(31, 21)	32	22	1970.11328	1970.11329	-1	2+4	PR(33, 6)	34	5	1971.45784	1971.45793	-9
2+4	PR(27, 9)	28	8	1970.13034	1970.13066	-33	225	RR(37, 12)	38	13	1971.45784	1971.45813	-30
225	RR(32, 12)	33	13	1970.14054	1970.14029	25	225	RR(37, 15)	38	16	1971.47388	1971.47334	54
225	RR(32, 15)	33	16	1970.15913	1970.15914	-1	2+4	RR(37, 9)	38	10	1971.50642	1971.50538	104
2+4	RR(31, 3)	32	4	1970.17022	1970.17024	-2	2+4	RR(36, 3)	37	4	1971.50642	1971.50666	-23
2+4	RR(32, 9)	33	10	1970.18333	1970.18317	16	2+4	PR(32, 9)	33	8	1971.50642W	1971.50958	-316
2+4	PR(26, 12)	27	11	1970.19797	1970.19872	-75	2+4	PR(28, 18)	29	17	1971.52705	1971.52736	-30
225	RR(32, 18)	33	19	1970.23784	1970.23968	-184	225	RR(37, 18)	38	19	1971.54881	1971.55033	-152
2+4	RR(32, 6)	33	7	1970.28422	1970.28388	33	2+4	PR(31, 12)	32	11	1971.58719	1971.58727	-7
2+4	PR(25, 15)	26	14	1970.29098	1970.28912	186	2+4	RR(37, 6)	38	7	1971.60763	1971.60756	7
225	RR(30, 27)	31	28	1970.29499	1970.29406	93	225	RR(35, 27)	36	28	1971.61440	1971.61407	33
225	RR(31, 24)	32	25	1970.31126	1970.31127	-1	225	RR(36, 24)	37	25	1971.62396	1971.62468	-72
2+4	PR(30, 3)	31	2	1970.35370	1970.35340	30	225	RR(34, 30)	35	31	1971.65087	1971.65086	1
2+4	PR(29, 6)	30	5	1970.36628	1970.36612	16	2+4	PR(30, 15)	31	14	1971.68713	1971.68701	12
2+4	RR(31, 0)	32	1	1970.36628	1970.36668	-40	225	RR(37, 21)	38	22	1971.68713	1971.68753	-40
225	RR(32, 21)	33	22	1970.38012									

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(I)		(II)		(III)	(IV)	(V)	(I)		(II)		(III)	(IV)	(V)
225	RR(39,15)	40	16	1971.98808	1971.98644	164	225	RR(38,33)	39	34	1973.01840	1973.01719	120
225	RR(34,33)	35	34	1971.99309	1971.99146	163	2+4	RR(43, 9)	44	10	1973.03607	1973.03587	19
2+4	PR(35, 6)	36	5	1971.99309	1971.99372	-63	2+4	PR(32,21)	33	20	1973.04371	1973.04279	92
2+4	RR(39, 9)	40	10	1972.02223	1972.02229	-6	2+4	PR(35,15)	36	14	1973.04371	1973.04336	35
2+4	RR(38, 3)	39	4	1972.02939	1972.02915	24	2+4	PR(39, 6)	40	5	1973.04371	1973.04509	-138
2+4	PR(34, 9)	35	8	1972.04893	1972.04942	-48	2+4	RR(42, 3)	43	4	1973.05295	1973.05345	-50
225	RR(39,18)	40	19	1972.06074	1972.06187	-112	225	RR(43,18)	44	19	1973.06155	1973.06314	-159
2+4	PR(30,18)	31	17	1972.08195	1972.08189	7	2+4	PR(38, 9)	39	8	1973.10895	1973.10896	-1
2+4	*R(39, 6)	40	10	1972.12574	1972.12446	128	225	RR(41,27)	42	28	1973.13715	1973.13629	86
225	RR(37,27)	38	28	1972.13027	1972.12897	131	2+4	*R(43, 6)	44	10	1973.13715	1973.13640	75
2+4	PR(33,12)	34	11	1972.13027	1972.13101	-74	225	RR(42,24)	43	25	1973.13715	1973.13955	-239
2+4	RR(39, 6)	40	7	1972.13711	1972.13610	101	225	RR(37,36)	38	37	1973.14392	1973.14225	167
225	RR(38,24)	39	25	1972.13711	1972.13706	6	2+4	RR(43, 6)	44	7	1973.15016	1973.14910	106
225	RR(36,30)	37	31	1972.16870	1972.16846	24	2+4	PR(34,18)	35	17	1973.17027	1973.17106	-79
225	RR(39,21)	40	22	1972.19674	1972.19758	-83	225	RR(40,30)	41	31	1973.18098	1973.18101	-3
2+4	RR(38, 0)	39	1	1972.22646	1972.22492	154	225	RR(43,21)	44	22	1973.19600	1973.19563	37
225	RR(40,12)	41	13	1972.22646	1972.22752	-106	2+4	PR(37,12)	38	11	1973.19600	1973.19845	-245
2+4	PR(37, 3)	38	2	1972.23229	1972.23188	40	225	RR(44,12)	45	13	1973.22841	1973.22855	-14
2+4	PR(32,15)	33	14	1972.23229	1972.23454	-225	225	RR(44,15)	45	16	1973.23879	1973.23777	103
225	RR(40,15)	41	16	1972.24102	1972.24030	72	2+4	RR(42, 0)	43	1	1973.24819	1973.24874	-56
225	RR(35,33)	36	34	1972.25141	1972.25075	66	2+4	PR(41, 3)	42	2	1973.26870	1973.26805	66
2+4	PR(36, 6)	37	5	1972.25925	1972.25909	16	225	RR(39,33)	40	34	1973.26870	1973.26887	-17
2+4	RR(40, 9)	41	10	1972.27830	1972.27820	10	2+4	RR(44, 9)	45	10	1973.28509	1973.28507	1
2+4	RR(39, 3)	40	4	1972.28768	1972.28781	-12	2+4	RR(43, 3)	44	4	1973.30603	1973.30522	81
225	RR(40,18)	41	19	1972.31453	1972.31491	-37	225	RR(44,18)	45	19	1973.30603	1973.30892	-289
2+4	PR(35, 9)	36	8	1972.31453	1972.31682	-228	2+4	PR(36,15)	37	14	1973.30603W	1973.30964	-361
2+4	PR(31,18)	32	17	1972.35657	1972.35667	-10	2+4	PR(39, 9)	40	8	1973.36903	1973.36966	-62
2+4	*R(40, 6)	41	10	1972.38120	1972.38019	101	225	RR(42,27)	43	28	1973.38413	1973.38344	69
225	RR(38,27)	39	28	1972.38120	1972.38360	-240	2+4	*R(44, 6)	45	10	1973.38413	1973.38481	-68
225	RR(39,24)	40	25	1972.39043	1972.39046	-3	225	RR(43,24)	44	25	1973.38413	1973.38553	-140
2+4	RR(40, 6)	41	7	1972.39043	1972.39188	-144	225	RR(38,36)	39	37	1973.39705	1973.39538	167
2+4	PR(34,12)	35	11	1972.39997	1972.40037	-40	2+4	RR(44, 6)	45	7	1973.39705	1973.39815	-110
225	RR(37,30)	38	31	1972.42480	1972.42443	37	225	RR(41,30)	42	31	1973.42820	1973.42943	-123
225	RR(40,21)	41	22	1972.44920	1972.44984	-65	2+4	PR(35,18)	36	17	1973.43939	1973.43921	18
225	RR(41,12)	42	13	1972.48156	1972.48044	112	225	RR(44,21)	45	22	1973.43939	1973.44056	-117
2+4	RR(39, 0)	40	1	1972.48156	1972.48347	-191	2+4	PR(38,12)	39	11	1973.46122	1973.46114	8
225	RR(41,15)	42	16	1972.49303	1972.49236	67	225	RR(45,12)	46	13	1973.47420	1973.47438	-18
2+4	PR(38, 3)	39	2	1972.49303	1972.49346	-43	225	RR(45,15)	46	16	1973.48390	1973.48265	125
2+4	PR(30,21)	31	20	1972.49303	1972.49458	-155	2+4	RR(43, 0)	44	1	1973.49960	1973.50038	-77
2+4	PR(33,15)	34	14	1972.50756	1972.50581	175	2+4	*R(45, 9)	46	13	1973.51946	1973.51848	98
225	RR(36,33)	37	34	1972.50756	1972.50813	-57	225	RR(40,33)	41	34	1973.51946	1973.51865	81
2+4	*R(41, 9)	42	13	1972.52200	1972.52056	144	2+4	PR(42, 3)	43	2	1973.51946W	1973.52286	-340
2+4	PR(37, 6)	38	5	1972.52200	1972.52278	-78	2+4	RR(45, 9)	46	10	1973.53236	1973.53259	-23
2+4	RR(41, 9)	42	10	1972.53192	1972.53244	-51	225	RR(45,18)	46	19	1973.55332	1973.55289	43
2+4	RR(40, 3)	41	4	1972.54475	1972.54475	0	2+4	RR(44, 3)	45	4	1973.55332	1973.55526	-195
225	RR(41,18)	42	19	1972.56517	1972.56613	-96	2+4	PR(41, 6)	42	5	1973.56140	1973.56067	73
2+4	PR(36, 9)	37	8	1972.58229	1972.58254	-25	2+4	PR(37,15)	38	14	1973.57360	1973.57425	-66
2+4	RR(41, 6)	42	7	1972.63499	1972.63409	90	2+4	PR(34,21)	35	20	1973.58457	1973.58440	18
225	RR(39,27)	40	28	1972.63499	1972.63637	-138	2+4	PR(40, 9)	41	8	1973.62916	1973.62867	49
225	RR(40,24)	41	25	1972.64244	1972.64201	43	225	RR(43,27)	44	28	1973.62916	1973.62872	44
2+4	PR(35,12)	36	11	1972.66752	1972.66807	-55	225	RR(44,24)	45	25	1973.62916	1973.62967	-51
225	RR(38,30)	39	31	1972.67922	1972.67851	70	2+4	*R(45, 6)	46	10	1973.62916	1973.63139	-223
225	RR(41,21)	42	22	1972.69980	1972.70028	-47	2+4	RR(45, 6)	46	7	1973.64644	1973.64551	93
225	RR(42,12)	43	13	1972.73095	1972.73158	-63	225	RR(39,36)	40	37	1973.64644	1973.64660	-15
2+4	RR(40, 0)	41	1	1972.74129	1972.74029	100	225	RR(42,30)	43	31	1973.67568	1973.67596	-28
225	RR(42,15)	43	16	1972.74129	1972.74262	-133	225	RR(45,21)	46	22	1973.68323	1973.68366	-42
2+4	PR(39, 3)	40	2	1972.75269	1972.75335	-66	2+4	PR(36,18)	37	17	1973.70570	1973.70570	-1
225	RR(37,33)	38	34	1972.76443	1972.76361	82	225	RR(46,12)	47	13	1973.71974	1973.71844	129
2+4	*R(42, 9)	43	13	1972.77380	1972.77278	102	2+4	PR(39,12)	40	11	1973.71974	1973.72216	-242
2+4	PR(34,15)	35	14	1972.77380	1972.77542	-162	225	RR(46,15)	47	16	1973.72712	1973.72575	138
2+4	PR(38, 6)	39	5	1972.78466	1972.78478	-12	2+4	RR(44, 0)	45	1	1973.75041	1973.75028	12
2+4	RR(42, 9)	43	10	1972.78466	1972.78499	-33	2+4	*R(46, 9)	47	13	1973.76499	1973.76340	160
2+4	RR(41, 3)	42	4	1972.79999	1972.79996	3	225	RR(41,33)	42	34	1973.76499	1973.76653	-153
225	RR(42,18)	43	19	1972.81441	1972.81554	-113	2+4	PR(43, 3)	44	2	1973.77600	1973.77598	2
2+4	PR(37, 9)	38	8	1972.84680	1972.84659	21	2+4	RR(46, 9)	47	10	1973.77600	1973.77843	-243
2+4	*R(42, 6)	43	10	1972.88749	1972.88616	134	225	RR(46,18)	47	19	1973.79377	1973.79504	-128
225	RR(36,36)	37	37	1972.88749	1972.88720	30	2+4	RR(45, 3)	46	4	1973.80339	1973.80359	-19
225	RR(40,27)	41	28	1972.88749	1972.88727	23	2+4	PR(42, 6)	43	5	1973.81572	1973.81593	-20
225	RR(41,24)	42	25	1972.88749W	1972.89170	-421	2+4	PR(38,15)	39	14	1973.83693	1973.83721	-28

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	(I)	(II)	(III)	(IV)	(V)		(I)	(II)	(III)	(IV)	(V)		
225	RR(47,15)	48	16	1973.96916	1973.96705	211	225	RR(50,21)	51	22	1974.87205	1974.87165	40
2+4	PR(37,18)	38	17	1973.96916	1973.97053	-138	2+4	PR(42,15)	43	14	1974.87205	1974.87237	-32
2+4	PR(40,12)	41	11	1973.98113	1973.98150	-37	225	RR(44,36)	45	37	1974.87205	1974.87398	-193
2+4	RR(45, 0)	46	1	1973.99873	1973.99846	27	225	RR(47,30)	48	31	1974.88043	1974.88033	11
225	RR(42,33)	43	34	1974.01167	1974.01250	-83	2+4	PR(45, 9)	46	8	1974.89818	1974.89861	-42
2+4	PR(34,24)	35	23	1974.01167	1974.01300	-133	2+4	PR(39,21)	40	20	1974.91141	1974.90946	195
2+4	RR(47, 9)	48	10	1974.02346	1974.02257	89	225	RR(51,12)	52	13	1974.91141	1974.91230	-90
2+4	PR(44, 3)	45	2	1974.02346W	1974.02741	-395	225	RR(51,15)	52	16	1974.91141	1974.91439	-298
225	RR(47,18)	48	19	1974.03423	1974.03539	-116	2+4	RR(51, 9)	52	10	1974.96108	1974.96084	24
2+4	RR(46, 3)	47	4	1974.05000	1974.05019	-20	2+4	RR(49, 0)	50	1	1974.97556	1974.97392	164
225	RR(39,39)	40	40	1974.06111	1974.06008	103	225	RR(46,33)	47	34	1974.97556	1974.97740	-183
2+4	PR(43, 6)	44	5	1974.06945	1974.06950	-5	225	RR(51,18)	52	19	1974.97556W	1974.97867	-311
2+4	PR(39,15)	40	14	1974.09815	1974.09849	-34	2+4	PR(44,12)	45	11	1975.00258	1975.00218	39
225	RR(46,24)	47	25	1974.11279	1974.11238	41	2+4	PR(48, 3)	49	2	1975.01630	1975.01624	6
225	RR(45,27)	46	28	1974.11279	1974.11367	-89	2+4	RR(50, 3)	51	4	1975.01630W	1975.01943	-313
2+4	RR(47, 6)	48	7	1974.12002	1974.11910	93	225	RR(43,39)	44	40	1975.04480	1975.04405	75
2+4	PR(36,21)	37	20	1974.12002	1974.11938	64	225	RR(50,24)	51	25	1975.05601	1975.05559	41
2+4	PR(42, 9)	43	8	1974.14240	1974.14168	73	225	RR(49,27)	50	28	1975.06171	1975.06114	56
225	RR(41,36)	42	37	1974.14240	1974.14329	-89	2+4	PR(47, 6)	48	5	1975.06680	1975.06696	-17
225	RR(44,30)	45	31	1974.16329	1974.16337	-8	2+4	*R(51, 6)	52	10	1975.07509	1975.07274	234
225	RR(47,21)	48	22	1974.16329	1974.16435	-106	2+4	PR(38,24)	39	23	1975.07509	1975.07695	-187
225	RR(48,12)	49	13	1974.20346	1974.20128	218	2+4	RR(51, 6)	52	7	1975.09385	1975.09405	-20
225	RR(48,15)	49	16	1974.20861	1974.20657	204	225	RR(51,21)	52	22	1975.10288	1975.10377	-89
2+4	PR(38,18)	39	17	1974.23459	1974.23371	89	225	RR(45,36)	46	37	1975.11409	1975.11372	37
2+4	PR(41,12)	42	11	1974.23459W	1974.23918	-458	225	RR(48,30)	49	31	1975.11409	1975.11554	-145
2+4	RR(46, 0)	47	1	1974.24563	1974.24492	72	2+4	PR(43,15)	44	14	1975.12648	1975.12700	-52
2+4	*R(48, 9)	49	13	1974.24563	1974.24780	-216	225	RR(52,12)	53	13	1975.14808	1975.14580	227
225	RR(43,33)	44	34	1974.25665	1974.25658	7	225	RR(52,15)	53	16	1975.14808	1975.14676	131
2+4	RR(48, 9)	49	10	1974.26527	1974.26502	25	2+4	PR(46, 9)	47	8	1975.14808	1975.14756	51
225	RR(48,18)	49	19	1974.27476	1974.27392	84	2+4	PR(40,21)	41	20	1975.16751	1975.16951	-200
2+4	PR(45, 3)	46	2	1974.27476	1974.27715	-239	2+4	RR(52, 9)	53	10	1975.19485	1975.19491	-6
2+4	RR(47, 3)	48	4	1974.29383	1974.29508	-125	225	RR(52,18)	53	19	1975.21258	1975.20998	261
225	RR(40,39)	41	40	1974.31019	1974.30896	123	2+4	RR(50, 0)	51	1	1975.21258	1975.21348	-89
2+4	PR(44, 6)	45	5	1974.32152	1974.32139	13	225	RR(47,33)	48	34	1975.21258	1975.21387	-129
225	RR(47,24)	48	25	1974.35115	1974.35096	19	225	RR(42,42)	43	43	1975.24743	1975.24573	170
225	RR(46,27)	47	28	1974.35115	1974.35334	-220	2+4	RR(51, 3)	52	4	1975.25687	1975.25745	-58
2+4	PR(40,15)	41	14	1974.35866	1974.35812	54	2+4	PR(49, 3)	50	2	1975.25687	1975.25923	-236
2+4	*R(48, 6)	49	10	1974.35866	1974.36022	-157	2+4	PR(42,18)	43	17	1975.26935	1975.26981	-45
2+4	RR(48, 6)	49	7	1974.37859	1974.37744	115	225	RR(44,39)	45	40	1975.28605	1975.28522	83
225	RR(42,36)	43	37	1974.39017	1974.38877	140	225	RR(51,24)	52	25	1975.28605	1975.28677	-73
225	RR(48,21)	49	22	1974.40213	1974.40195	18	225	RR(50,27)	51	28	1975.29304	1975.29334	-30
225	RR(45,30)	46	31	1974.40213	1974.40424	-211	2+4	*R(52, 6)	53	10	1975.30627	1975.30664	-37
225	RR(49,12)	50	13	1974.43847	1974.44004	-157	2+4	PR(48, 6)	49	5	1975.31200	1975.31212	-12
225	RR(49,15)	50	16	1974.44663	1974.44429	234	2+4	RR(52, 6)	53	7	1975.33161	1975.32950	210
2+4	RR(49, 9)	50	10	1974.48950	1974.48728	222	225	RR(52,21)	53	22	1975.33161	1975.33405	-245
2+4	RR(47, 0)	48	1	1974.48950	1974.48964	-14	225	RR(49,30)	50	31	1975.34947	1975.34887	59
2+4	PR(42,12)	43	11	1974.49552	1974.49518	33	225	RR(46,36)	47	37	1975.34947	1975.35154	-207
2+4	PR(39,18)	40	17	1974.49552	1974.49522	29	225	RR(53,15)	54	16	1975.37911	1975.37735	176
225	RR(49,18)	50	19	1974.50878	1974.51065	-186	225	RR(53,12)	54	13	1975.37911	1975.37755	157
2+4	PR(46, 3)	47	2	1974.52442	1974.52520	-78	2+4	PR(44,15)	45	14	1975.37911	1975.37996	-85
2+4	RR(48, 3)	49	4	1974.53804	1974.53824	-20	2+4	PR(47, 9)	48	8	1975.39468	1975.39484	-16
225	RR(41,39)	42	40	1974.55706	1974.55591	114	2+4	RR(53, 9)	54	10	1975.42631	1975.42719	-88
2+4	PR(45, 6)	46	5	1974.57091	1974.57160	-68	2+4	PR(41,21)	42	20	1975.42631	1975.42790	-159
225	RR(48,24)	49	25	1974.58876	1974.58768	108	225	RR(53,18)	54	19	1975.43847	1975.43948	-101
225	RR(47,27)	48	28	1974.58876	1974.59115	-239	225	RR(48,33)	49	34	1975.44988	1975.44844	143
2+4	*R(49, 6)	50	10	1974.60003	1974.59954	49	2+4	RR(51, 0)	52	1	1975.44988	1975.45131	-143
2+4	PR(41,15)	42	14	1974.61664	1974.61608	56	225	RR(43,42)	44	43	1975.48991	1975.48842	149
2+4	RR(49, 6)	50	7	1974.61664	1974.61802	-138	2+4	RR(52, 3)	53	4	1975.48991W	1975.49376	-385
225	RR(43,36)	44	37	1974.63215	1974.63233	-19	2+4	PR(50, 3)	51	2	1975.50131	1975.50053	78
225	RR(46,30)	47	31	1974.64405	1974.64322	83	2+4	PR(46,12)	47	11	1975.50131	1975.50250	-119
2+4	PR(38,21)	39	20	1974.648									

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225	RR(44,42)	45	43	1975.72846	1975.72916	-71	225	RR(48,42)	49	43	1976.67351	1976.67280	71	225	RR(58,21)	59	22	1976.67847	1976.67748	100
2+4	PR(51,3)	52	2	1975.74084	1975.74015	68	225	RR(46,45)	47	46	1976.67847	1976.67789	58	225	RR(58,21)	59	22	1976.67847	1976.67748	100
225	RR(53,24)	54	25	1975.74084	1975.74360	-276	225	RR(46,45)	47	46	1976.67847	1976.67789	58	225	RR(58,21)	59	22	1976.67847	1976.67748	100
2+4	PR(47,12)	48	11	1975.74964	1975.75016	-52	2+4	PR(55,3)	56	2	1976.67847W	1976.68181	-333	2+4	PR(55,3)	56	2	1976.67847W	1976.68181	-333
225	RR(52,27)	53	28	1975.74964	1975.75214	-250	225	RR(50,39)	51	40	1976.69322	1976.69186	137	225	RR(50,39)	51	40	1976.69322	1976.69186	137
225	RR(46,39)	47	40	1975.76190	1975.76180	10	2+4	PR(46,21)	47	20	1976.69322	1976.69502	-179	2+4	PR(46,21)	47	20	1976.69322	1976.69502	-179
2+4	*R(54,6)	55	10	1975.76854	1975.76902	-48	2+4	RR(58,6)	59	7	1976.70656	1976.70607	48	2+4	RR(58,6)	59	7	1976.70656	1976.70607	48
2+4	PR(44,18)	45	17	1975.77792	1975.77790	2	225	RR(55,30)	56	31	1976.70656	1976.70933	-277	225	RR(55,30)	56	31	1976.70656	1976.70933	-277
225	RR(54,21)	55	22	1975.78875	1975.78915	-39	2+4	PR(51,12)	52	11	1976.72306	1976.72407	-100	2+4	PR(51,12)	52	11	1976.72306	1976.72407	-100
2+4	RR(54,6)	55	7	1975.79651	1975.79525	126	225	RR(59,12)	60	13	1976.73283	1976.73141	142	225	RR(59,12)	60	13	1976.73283	1976.73141	142
2+4	PR(50,6)	51	5	1975.79651	1975.79739	-88	2+4	PR(54,6)	55	5	1976.74701	1976.74775	-74	2+4	PR(54,6)	55	5	1976.74701	1976.74775	-74
225	RR(51,30)	52	31	1975.80953	1975.80989	-36	2+4	PR(48,18)	49	17	1976.77438	1976.77415	24	2+4	PR(48,18)	49	17	1976.77438	1976.77415	24
225	RR(48,36)	49	37	1975.82028	1975.82145	-117	2+4	RR(59,9)	60	10	1976.78433	1976.78309	124	2+4	RR(59,9)	60	10	1976.78433	1976.78309	124
225	RR(55,12)	56	13	1975.83715	1975.83579	136	2+4	PR(43,27)	44	26	1976.81457	1976.81278	178	2+4	PR(43,27)	44	26	1976.81457	1976.81278	178
2+4	PR(49,9)	50	8	1975.88328	1975.88437	-109	225	RR(54,33)	55	34	1976.81457	1976.81601	-144	225	RR(54,33)	55	34	1976.81457	1976.81601	-144
225	RR(55,18)	56	19	1975.89315	1975.89307	8	2+4	RR(57,0)	58	1	1976.84206	1976.84215	-9	2+4	RR(57,0)	58	1	1976.84206	1976.84215	-9
225	RR(50,33)	51	34	1975.91204	1975.91189	15	2+4	PR(53,9)	54	8	1976.84206	1976.84332	-127	2+4	PR(53,9)	54	8	1976.84206	1976.84332	-127
2+4	RR(53,0)	54	1	1975.92190	1975.92180	10	225	RR(58,24)	59	25	1976.85361	1976.85341	20	225	RR(58,24)	59	25	1976.85361	1976.85341	20
2+4	RR(54,3)	55	4	1975.95980	1975.96123	-143	225	RR(57,27)	58	28	1976.86454	1976.86653	-199	225	RR(57,27)	58	28	1976.86454	1976.86653	-199
225	RR(45,42)	46	43	1975.96876	1975.96798	78	2+4	PR(45,24)	46	23	1976.87519	1976.87528	-9	2+4	PR(45,24)	46	23	1976.87519	1976.87528	-9
225	RR(54,24)	55	25	1975.96876	1975.96925	-49	2+4	RR(58,3)	59	4	1976.87519	1976.87568	-49	2+4	RR(58,3)	59	4	1976.87519	1976.87568	-49
2+4	PR(52,3)	53	2	1975.97788	1975.97809	-21	225	RR(59,21)	60	22	1976.89528	1976.89562	-34	225	RR(59,21)	60	22	1976.89528	1976.89562	-34
225	RR(53,27)	54	28	1975.97788	1975.97874	-86	225	RR(49,42)	50	43	1976.90090	1976.90386	-296	225	RR(49,42)	50	43	1976.90090	1976.90386	-296
2+4	PR(48,12)	49	11	1975.99619	1975.99614	5	225	RR(47,45)	48	46	1976.91261	1976.91241	20	225	RR(47,45)	48	46	1976.91261	1976.91241	20
225	RR(47,39)	48	40	1975.99619	1975.99720	-101	2+4	PR(56,3)	57	2	1976.91261	1976.91302	-41	2+4	PR(56,3)	57	2	1976.91261	1976.91302	-41
2+4	RR(55,6)	56	7	1975.99619	1975.99751	-133	2+4	RR(59,6)	60	7	1976.92884	1976.92946	-62	2+4	RR(59,6)	60	7	1976.92884	1976.92946	-62
225	RR(55,21)	56	22	1976.01353	1976.01396	-44	225	RR(56,30)	57	31	1976.92884	1976.92949	-65	225	RR(56,30)	57	31	1976.92884	1976.92949	-65
2+4	PR(45,18)	46	17	1976.02832	1976.02945	-113	2+4	PR(47,21)	48	20	1976.94318	1976.94347	-28	2+4	PR(47,21)	48	20	1976.94318	1976.94347	-28
2+4	PR(51,6)	52	5	1976.03733	1976.03750	-18	225	RR(60,12)	61	13	1976.95222	1976.95100	122	225	RR(60,12)	61	13	1976.95222	1976.95100	122
225	RR(52,30)	53	31	1976.03733	1976.03757	-24	225	RR(53,36)	54	37	1976.96206	1976.96274	-68	225	RR(53,36)	54	37	1976.96206	1976.96274	-68
225	RR(49,36)	50	37	1976.05327	1976.05353	-27	2+4	PR(52,12)	53	11	1976.96206	1976.96337	-130	2+4	PR(52,12)	53	11	1976.96206	1976.96337	-130
225	RR(56,12)	57	13	1976.06379	1976.06230	150	2+4	PR(55,6)	56	5	1976.98032	1976.98115	-82	2+4	PR(55,6)	56	5	1976.98032	1976.98115	-82
2+4	RR(56,9)	57	10	1976.11451	1976.11323	128	225	RR(60,18)	61	19	1976.99535	1976.99560	-25	225	RR(60,18)	61	19	1976.99535	1976.99560	-25
2+4	PR(42,24)	43	23	1976.11451	1976.11448	3	2+4	RR(60,9)	61	10	1977.00235	1977.00277	-42	2+4	RR(60,9)	61	10	1977.00235	1977.00277	-42
225	RR(56,18)	57	19	1976.11451	1976.11717	-265	2+4	PR(49,18)	50	17	1977.01983	1977.01905	78	2+4	PR(49,18)	50	17	1977.01983	1977.01905	78
2+4	PR(50,9)	51	8	1976.12714	1976.12662	52	225	RR(55,33)	56	34	1977.03675	1977.03730	-55	225	RR(55,33)	56	34	1977.03675	1977.03730	-55
2+4	PR(47,15)	48	14	1976.12714	1976.12886	-173	2+4	PR(44,27)	45	26	1977.06776	1977.06653	123	2+4	PR(44,27)	45	26	1977.06776	1977.06653	123
225	RR(51,33)	52	34	1976.14097	1976.14077	20	2+4	RR(58,0)	59	1	1977.06776	1977.06794	-18	2+4	RR(58,0)	59	1	1977.06776	1977.06794	-18
2+4	RR(54,0)	55	1	1976.15390	1976.15447	-57	225	RR(59,24)	60	25	1977.06776	1977.06985	-209	225	RR(59,24)	60	25	1977.06776	1977.06985	-209
2+4	RR(55,3)	56	4	1976.19216	1976.19240	-24	2+4	PR(54												

Continued

(I)	(II)	(III)	(IV)	(V)	(I)	(II)	(III)	(IV)	(V)
225 RR(54,39)	55 40	1977.59101	1977.59112	-11	2+4 PR(53,21)	54 20	1978.39967	1978.39937	30
225 RR(63,12)	64 13	1977.60007	1977.59950	57	2+4 PR(55,18)	56 17	1978.45446	1978.45362	84
225 RR(50,45)	51 46	1977.60007W	1977.60428	-421	2+4 PR(60, 9)	61 8	1978.45446	1978.45705	-260
2+4 PR(48,24)	49 23	1977.62225	1977.62119	106	225 RR(56,42)	57 43	1978.46998	1978.46713	284
225 RR(48,48)	49 49	1977.64293	1977.64487	-195	225 RR(60,36)	61 37	1978.48081	1978.48031	49
2+4 PR(58, 6)	59 5	1977.67093	1977.67125	-33	225 RR(54,45)	55 46	1978.49938	1978.49953	-15
2+4 PR(55,12)	56 11	1977.67093	1977.67126	-33	2+4 PR(57,15)	58 14	1978.51781	1978.51695	86
2+4 PR(50,21)	51 20	1977.67878	1977.67888	-10	225 RR(62,33)	63 34	1978.53398	1978.53330	68
225 RR(58,33)	59 34	1977.68944	1977.68980	-35	225 RR(66,24)	67 25	1978.53398	1978.53366	33
225 RR(62,24)	63 25	1977.70812	1977.70817	-5	225 RR(65,27)	66 28	1978.55324	1978.55298	26
225 RR(61,27)	62 28	1977.72462	1977.72458	4	225 RR(52,48)	53 49	1978.55324	1978.55400	-76
2+4 RR(61, 0)	62 1	1977.73506	1977.73503	3	2+4 PR(50,27)	51 26	1978.55324	1978.55431	-107
2+4 PR(52,18)	53 17	1977.74472	1977.74381	91	2+4 PR(62, 6)	63 5	1978.56830	1978.56793	36
2+4 RR(62, 3)	63 4	1977.76191	1977.76287	-96	2+4 PR(59,12)	60 11	1978.59145	1978.59175	-30
2+4 PR(57, 9)	58 8	1977.77549	1977.77549	0	2+4 PR(52,24)	53 23	1978.59145	1978.59256	-111
225 RR(60,30)	61 31	1977.79188	1977.79136	51	2+4 RR(65, 0)	66 1	1978.60102	1978.60053	50
225 RR(53,42)	54 43	1977.80820	1977.80877	-57	225 RR(64,30)	65 31	1978.62197	1978.62327	-130
2+4 PR(47,27)	48 26	1977.81887	1977.81785	102	2+4 PR(54,21)	55 20	1978.63623	1978.63621	2
2+4 PR(54,15)	55 14	1977.81887	1977.81801	86	2+4 PR(56,18)	57 17	1978.68758	1978.68690	69
225 RR(51,45)	52 46	1977.83082	1977.83101	-19	225 RR(55,45)	56 46	1978.71855	1978.71848	8
225 RR(57,36)	58 37	1977.84160	1977.84138	22	225 RR(67,24)	68 25	1978.73656	1978.73547	109
225 RR(49,48)	50 49	1977.87412	1977.87509	-97	225 RR(53,48)	54 49	1978.77297W	1978.77639	-342
2+4 PR(59, 6)	60 5	1977.89919	1977.89793	125	2+4 PR(55,21)	56 20	1978.87019	1978.87140	-121
225 RR(59,33)	60 34	1977.90452	1977.90351	101	225 RR(58,42)	59 43	1978.89701	1978.89637	64
2+4 PR(56,12)	57 11	1977.90452	1977.90388	64	225 RR(62,36)	63 37	1978.89701	1978.89674	27
225 RR(63,24)	64 25	1977.91824	1977.91728	96	2+4 PR(57,18)	58 17	1978.91821	1978.91851	-31
225 RR(62,27)	63 28	1977.93556	1977.93445	111	225 RR(56,45)	57 46	1978.93736	1978.93548	188
2+4 RR(62, 0)	63 1	1977.95368	1977.95397	-29	2+4 PR(59,15)	60 14	1978.97420	1978.97459	-39
225 RR(64,21)	65 22	1977.95368	1977.95553	-186	225 RR(54,48)	55 49	1978.99685	1978.99682	3
2+4 RR(63, 3)	64 4	1977.98082	1977.98043	39	2+4 RR(67, 0)	68 1	1979.02354	1979.02304	50
2+4 PR(53,18)	54 17	1977.98082	1977.98208	-126	2+4 PR(54,24)	55 23	1979.06702	1979.06832	-130
225 RR(61,30)	62 31	1978.00251	1978.00214	37	225 RR(61,39)	62 40	1979.09150	1979.09079	71
2+4 PR(58, 9)	59 8	1978.00251	1978.00435	-184	225 RR(63,36)	64 37	1979.10232	1979.10210	22
2+4 PR(55,15)	56 14	1978.05353	1978.05265	88	2+4 PR(56,21)	57 20	1979.10232	1979.10493	-261
225 RR(65,18)	66 19	1978.05353	1978.05339	14	2+4 PR(63, 9)	64 8	1979.12324	1979.12358	-34
225 RR(52,45)	53 46	1978.05353	1978.05580	-227	2+4 PR(58,18)	59 17	1979.14891	1979.14847	44
2+4 PR(48,27)	49 26	1978.06466	1978.06499	-33	225 RR(57,45)	58 46	1979.14891	1979.15053	-162
225 RR(50,48)	51 49	1978.10175	1978.10335	-159	225 RR(55,48)	56 49	1979.21509	1979.21530	-21
2+4 PR(60, 6)	61 5	1978.12355	1978.12294	61	2+4 RR(68, 0)	69 1	1979.23014	1979.23174	-161
225 RR(64,24)	65 25	1978.12355	1978.12457	-101	2+4 PR(62,12)	63 11	1979.26492	1979.26461	31
2+4 PR(57,12)	58 11	1978.13451	1978.13484	-33	2+4 PR(55,24)	56 23	1979.30523	1979.30371	152
225 RR(63,27)	64 28	1978.14220	1978.14248	-27	2+4 PR(64, 9)	65 8	1979.34350	1979.34242	109
2+4 RR(63, 0)	64 1	1978.17146	1978.17119	27	225 RR(58,45)	59 46	1979.36293	1979.36364	-71
225 RR(62,30)	63 31	1978.21054	1978.21106	-52	2+4 PR(59,18)	60 17	1979.37683	1979.37676	7
2+4 PR(54,18)	55 17	1978.21817	1978.21868	-51	2+4 PR(61,15)	62 14	1979.42513	1979.42557	-44
225 RR(57,39)	58 40	1978.24988W	1978.24536	451	2+4 RR(69, 0)	70 1	1979.43871	1979.43875	-4
225 RR(55,42)	56 43	1978.24988	1978.24962	26	2+4 PR(60,18)	61 17	1979.60381	1979.60339	41
225 RR(53,45)	54 46	1978.28002	1978.27864	139	225 RR(57,48)	58 49	1979.64555	1979.64639	-84
2+4 PR(56,15)	57 14	1978.28601	1978.28563	38	2+4 PR(64,12)	65 11	1979.70497	1979.70485	12
225 RR(61,33)	62 34	1978.32587	1978.32526	61	2+4 PR(57,24)	58 23	1979.76980	1979.76953	27
225 RR(51,48)	52 49	1978.32964	1978.32965	-1	225 RR(60,45)	61 46	1979.78503	1979.78403	101
225 RR(65,24)	66 25	1978.32964	1978.33002	-38	2+4 PR(59,21)	60 20	1979.79604	1979.79556	48
2+4 PR(61, 6)	62 5	1978.34741	1978.34628	114	2+4 PR(61,18)	62 17	1979.82791	1979.82837	-45
225 RR(64,27)	65 28	1978.34741	1978.34865	-124	2+4 PR(63,15)	64 14	1979.87066	1979.86989	77
2+4 PR(58,12)	59 11	1978.36422	1978.36413	9	2+4 PR(56,27)	57 26	1979.98399	1979.98259	140