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EVALUATION OF NEUTRON NUCLEAR DATA FOR ^{12}C

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Evaluation of Neutron Nuclear Data for ^{12}C

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Neutron nuclear data of ^{12}C have been evaluated for JENDL-3 in the energy range from 10^{-5} eV to 20 MeV. Evaluated quantities are the total, elastic and inelastic scattering, radiative capture, photon-production, (n,p), (n,d) and (n, α) reaction cross sections and the angular or energy distribution of neutrons and photons. The total cross section below the threshold energy of the inelastic scattering has been calculated on the basis of the R-matrix theory. Three discrete levels have been taken into account for the inelastic scattering.

Keywords: Evaluation, Neutron Nuclear Data, Carbon-12, Cross Section, JENDL-3, R-Matrix Theory, 10^{-5} eV \sim 20 MeV Range

^{12}C の中性子核データの評価

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(1983年11月22日受理)

JENDL-3 のために ^{12}C の中性子核データを 10^{-5} eV から 20 MeV のエネルギーにわたって評価した。評価した量は全断面積，弾性散乱断面積，非弾性散乱断面積，放射性捕獲断面積，光子生成断面積，(n,p) 反応断面積，(n,d) 反応断面積，(n, α) 反応断面積，中性子および光子の角度分布，エネルギー分布である。非弾性散乱のしきい値以下のエネルギーでは，全断面積は R-マトリックス理論により計算された。非弾性散乱では 3 つの離散準位を考慮した。

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1. Introduction

Neutron nuclear data of ^{12}C are important for transport calculations in fusion and fission reactors. Although these data are included in JENDL-1 and JENDL-2 (first and second versions of Japanese Evaluated Nuclear Data Library), the evaluated data are mainly based on ENDF/B-IV except for the total and elastic scattering cross sections below 2 MeV and the radiative capture cross section. The evaluation for ENDF/B-IV was made in 1973. Since then many measurements on ^{12}C have been performed. Thus, it was decided to re-evaluate the data of ^{12}C in order to raise the quality and reliability of the evaluated data.

The R-matrix theory is useful for analyses of neutron induced reactions on light nuclei such as Li, B, C and O. Recently, we developed a computer code based on the R-matrix theory. In the present work, this code has been used to calculate the total cross section and the elastic angular distribution.

This report describes the procedure and the results of the re-evaluation for each reaction. The present evaluated data are compiled in the ENDF/B format, and they are listed in Appendix.

2. Total Cross Section

The total cross section of ^{12}C has been measured by many groups.

The measurements after 1970 are the following:

Meadows and Whalen ¹⁾	(1970); 0.1 MeV ~ 1.5 MeV,
Foster, Jr. and Glasgow ²⁾	(1971); 2.5 MeV ~ 15 MeV,
Perey et al. ³⁾	(1972); 0.2 MeV ~ 20 MeV,
Cabe and Cance ⁴⁾	(1973); 0.1 MeV ~ 6 MeV,
Stooksberry and Anderson ⁵⁾	(1973); 0.4 MeV ~ 2.4 MeV,
Fasoli et al. ⁶⁾	(1973); 2.1 MeV ~ 4.7 MeV,
Mubarakmand et al. ⁷⁾	(1974); 1.7 MeV ~ 14.7 MeV,
Heaton, II et al. ⁸⁾	(1975); 1 keV ~ 15 MeV,
Nishimura et al. ⁹⁾	(1977); 20 keV ~ 240 keV,
Smith et al. ¹⁰⁾	(1979); 0.1 MeV ~ 4.5 MeV,
Lamaze et al. ¹¹⁾	(1979); 3 MeV ~ 40 MeV,
Auchampaugh et al. ¹²⁾	(1979); 1 MeV ~ 14 MeV,
Cierjacks et al. ¹³⁾	(1980); 3 MeV ~ 30 MeV.

In the keV region, Heaton, II et al.⁸⁾ measured the cross section with an experimental uncertainty of $\sim 1\%$, and their data are consistent with other data^{1,4,5,9,10)}. The data of Perey et al.³⁾ fluctuate considerably in the energy range from 180 keV to 500 keV. In the MeV region, Lamaze et al.¹¹⁾, Auchampaugh et al.¹²⁾ and Cierjacks et al.¹³⁾ presented a huge amount of data with high resolution. In the present evaluation the energy range of the total cross section was divided into three regions, and different methods of evaluation were employed in each energy region.

2.1 Below 10 eV

In this region, the total cross section was obtained by summing up the radiative capture and elastic scattering cross sections described in the following sections.

2.2 Between 10 eV and 4.8 MeV

The cross section was calculated on the basis of the R-matrix theory^{14,15)} using the computer code RESCAL¹⁶⁾. The R-matrix is given by

$$R_{c',c}^{J\pi} = R_c^{\infty J\pi} \delta_{c',c} + \sum_{\lambda} \frac{\gamma_{\lambda c'}^{J\pi} \gamma_{\lambda c}^{J\pi}}{(E_{\lambda}^{J\pi} - E)}, \quad (1)$$

where c' and c are conventional channel indices, $\gamma_{\lambda}^{J\pi}$ the reduced width amplitude and $E_{\lambda}^{J\pi}$ the energy eigenvalue. Symbol $R_c^{\infty J\pi}$ represents a diagonal component of distant level contributions, and it consists of two terms, i.e.,

$$R_c^{\infty J\pi} = R_{c0}^{\infty J\pi} + R_{c1}^{\infty J\pi} \cdot E_n, \quad (2)$$

where both $R_{c0}^{\infty J\pi}$ and $R_{c1}^{\infty J\pi}$ are assumed to be real constants and E_n stands for the incident neutron energy. The collision matrix is written in terms of the R-matrix parameters as follows:

$$U_{c',c}^{J\pi} = \exp\{i(\omega_{c'} + \omega_c)\} \cdot W_{c',c}^{J\pi}, \quad (3)$$

where

$$W_{c',c}^{J\pi} = \delta_{c',c} + 2i \sqrt{P_{c'}} (\Xi_c^{\infty J\pi} \delta_{c',c} + \sum_{\lambda\mu} \alpha_{\lambda c'}^{J\pi} \alpha_{\mu c}^{J\pi} \alpha_{\lambda\mu}^{J\pi}) \sqrt{P_c}. \quad (4)$$

Symbols used in eqs. (3) and (4) are,

$$\omega_c = \sigma_c - \phi_c, \quad (5)$$

$$\Xi_c^{\infty J\pi} = (1 - R_c^{\infty J\pi} L_c^{OJ\pi})^{-1} R_c^{\infty J\pi}, \quad (6)$$

$$\alpha_{\lambda c}^{J\pi} = (1 - R_c^{\infty J\pi} L_c^{OJ\pi})^{-1} \gamma_{\lambda c}^{J\pi}, \quad (7)$$

$$L_c^{OJ\pi} = S_c - B_c^{J\pi} + iP_c, \quad (8)$$

$$A_{ii}^{J\pi} = \epsilon_i^{J\pi}, \quad (9)$$

and

$$A_{ik}^{J\pi} = -\epsilon_{ik}^{J\pi} \quad (i \neq k), \quad (10)$$

where

$$\epsilon_{\lambda}^{J\pi} = E_{\lambda}^{J\pi} - E - \xi_{\lambda\lambda}^{J\pi}, \quad (11)$$

$$\xi_{\lambda\mu}^{J\pi} = \sum_c L_c^{OJ\pi} (1 - R_c^{\infty J\pi} L_c^{OJ\pi})^{-1} \gamma_{\lambda c}^{J\pi} \gamma_{\mu c}^{J\pi}. \quad (12)$$

Physical meaning of some parameters used here is,

σ_c : Coulomb phase shift

ϕ_c : hard sphere phase shift

S_c : shift factor

P_c : penetration factor

$B_c^{J\pi}$: logarithmic derivative involved in the specification of the real boundary condition.

In RESCAL, $B_c^{J\pi}$ is determined by

$$B_c^{J\pi} = S_c (E^{J\pi} + Q_c), \quad (13)$$

where Q_c is the Q-value and $E^{J\pi}$ is an arbitrary value to be given as an input.

The transition matrix $T_{c',c}^{J\pi}$ is related to the collision matrix $U_{c',c}^{J\pi}$ by

$$T_{c',c}^{J\pi} = \delta_{c',c} - U_{c',c}^{J\pi} \quad (14)$$

In the channel-spin coupling scheme, c represents a set of quantities $\{\alpha s \ell\}$, where s is the channel spin, ℓ is the orbital angular momentum and α defines a pair of nuclei. In this coupling, the total cross section is given by

$$\sigma_{\text{tot}} = \frac{\pi}{k_{\alpha}^2} \sum_J \frac{2(2J+1)}{(2I_1+1)(2I_2+1)} \sum_{s\ell} \text{Real Part} [T_{\alpha s \ell, \alpha s \ell}^{J\pi}] \quad (15)$$

where I_1 and I_2 are spins of the projectile and target nucleus, respectively, and k_{α} the wave number for the incident channel.

Initial guess-values of the R-matrix parameters were taken from the analysis by Smith et al.¹⁰⁾. By using the try-and-error method, the final values of parameters were obtained so as to give the best fit to the experimental data^{1,4,5,8-10)}, and they are given in Table I. Figures 1-3 show the calculated results together with ENDF/B-IV and -V. The peak values of two sharp resonances around 2.1 MeV and 2.8 MeV are given as follows:

Present work	6.04489 barns at 2.077 MeV
	5.26695 barns at 2.815 MeV
ENDF/B-V	6.04350 barns at 2.077 MeV
	5.07100 barns at 2.815 MeV
ENDF/B-IV	6.02330 barns at 2.0778 MeV.

In ENDF/B-IV, there is no resonance around 2.1 MeV, because experimental data indicating its existence were not available in 1973 when the evaluation was done.

2.3 Above 4.8 MeV

The evaluated cross section was obtained from the measurements of Lamaze et al.¹¹⁾, Auchampaugh et al.¹²⁾ and Cierjacks et al.¹³⁾ by using the spline function. Figures 4 and 5 show the present results.

3. Elastic Scattering

3.1 Below 10 eV

As for the thermal cross section, Koester et al.¹⁷⁾ obtained a value of 4.7456 b by using the Christiansen filter technique. The fourth edition of BNL-325¹⁸⁾ recommended a value of 4.746 b. We also adopted this recommended value in the energy range from 10^{-5} eV to 10 eV. The angular distribution was assumed to be isotropic in the center-of-mass system (CM), and this assumption was verified by the R-matrix calculation.

3.2 Between 10 eV and 4.8 MeV

The elastic scattering cross section was given as the difference between the total and radiative capture cross sections.

The angular distribution was obtained from the R-matrix calculations described in Sect. 2.2. It is given by the following form:

$$\frac{d\sigma_{\alpha',\alpha}}{d\Omega_{\alpha'}} = \frac{1}{4\pi} \sum_L B_L(\alpha',\alpha) P_L(\cos\theta_{\alpha'}) . \quad (16)$$

The Legendre coefficient $B_L(\alpha',\alpha)$ is written in terms of the transition matrix as follows:

$$B_L(\alpha',\alpha) = \frac{\pi}{k_\alpha^2} \frac{1}{(2I_1+1)(2I_2+1)} \sum_{s',s} (-1)^{s'-s} \\ \times \sum_{J_1 J_2} \sum_{\ell_1 \ell_2} \sum_{\ell_1' \ell_2'} Z(\ell_1 J_1 \ell_2 J_2; sL) Z(\ell_1' J_1 \ell_2' J_2; s'L)$$

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The angular distribution was obtained from the R-matrix calculations described in Sect. 2.2. It is given by the following form:

$$\frac{d\sigma_{\alpha'\alpha}}{d\Omega_{\alpha'}} = \frac{1}{4\pi} \sum_L B_L(\alpha', \alpha) P_L(\cos\theta_{\alpha'}) . \quad (16)$$

The Legendre coefficient $B_L(\alpha', \alpha)$ is written in terms of the transition matrix as follows:

$$B_L(\alpha', \alpha) = \frac{\pi}{k_{\alpha}^2} \frac{1}{(2I_1+1)(2I_2+1)} \sum_{s's} (-1)^{s'-s} \\ \times \sum_{J_1 J_2} \sum_{\ell_1 \ell_2} \sum_{\ell_1' \ell_2'} Z(\ell_1 J_1 \ell_2 J_2; sL) Z(\ell_1' J_1 \ell_2' J_2; s'L)$$

$$\times \text{Real Part} \left[T_{\alpha's'\ell'_1, \alpha s \ell_1}^{J_1 \pi_1} T_{\alpha's'\ell'_2, \alpha s \ell_2}^{J_2 \pi_2} \right]^* \quad (17)$$

where the Z coefficient is defined as usual.

3.3 Above 4.8 MeV

The cross section was obtained by subtracting the reaction cross section from the total cross section.

The angular distribution was evaluated on the basis of the following experimental data:

Deconninck and Meulders ¹⁹⁾	(1970); 17 MeV ~ 20 MeV,
Galati et al. ²⁰⁾	(1972); 3 MeV ~ 7 MeV,
Velkley et al. ²¹⁾	(1973); 7 MeV ~ 9 MeV,
Haouat et al. ²²⁾	(1975); 8 MeV ~ 14.5 MeV,
Thumm et al. ²³⁾	(1980); 15 MeV ~ 18 MeV.

The elastic scattering cross sections and the R-matrix calculations of the angular distributions are shown in Figs. 6 - 10 by comparing with experimental data^{10,19,21,22,24-29}.

4. Inelastic Scattering

4.1 4.44 MeV Level

The first excited state of ^{12}C ($J^\pi=2^+$) decays into the ground state ($J^\pi=0^+$) by emitting γ -rays. The angular distribution of γ -rays is given by

$$\frac{d\sigma_{n,n'\gamma}}{d\Omega_\gamma} = \frac{\sigma_{n,n'\gamma}}{4\pi} [1 + 5a_2 P_2(\cos\theta_\gamma) + 9a_4 P_4(\cos\theta_\gamma)] \quad (18)$$

where P_2 and P_4 are the second- and fourth-order Legendre polynomials,

$$\times \text{Real Part} \left[T_{\alpha's'\ell'_1, \alpha s \ell_1}^{J_1 \pi_1} T_{\alpha's'\ell'_2, \alpha s \ell_2}^{J_2 \pi_2} \right]^* \quad (17)$$

where the Z coefficient is defined as usual.

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where P_2 and P_4 are the second- and fourth-order Legendre polynomials,

respectively. Neglecting the fourth-order term, the cross section for the $(n, n'\gamma)$ reaction is estimated from the measurement at 125° where P_2 is zero, i.e.,

$$\sigma_{n, n'\gamma} = 4\pi \left. \frac{d\sigma_{n, n'\gamma}}{d\Omega_\gamma} \right|_{\theta_\gamma = 125^\circ}. \quad (19)$$

Morgan et al.³⁰⁾ measured these differential cross sections from 4.8 MeV to 19 MeV with a NaI(Tl) detector at two angles of 90° and 125° . Rogers et al.³¹⁾ also measured them at an angle of 125° . Both data are consistent with each other. We adopted the data of Morgan et al. here, since the angular distribution of γ -rays as well as the cross section could be extracted from them.

The angular distribution of neutrons was derived from the experimental data¹⁹⁻²³⁾.

4.2 7.65 MeV Level

There are several experimental data³²⁻³⁶⁾ only around 14 MeV. Thus, the cross section was estimated so that the elastic scattering cross section given as the difference between the total and reaction cross sections might be consistent with experimental data.

The angular distribution was calculated with distorted-wave Born approximation (DWBA) using the computer code DWUCK4³⁷⁾. The optical-model potential parameters were taken from the analysis by Thumm and Lesiecki³⁸⁾, and the parameters are listed in Table II.

4.3 9.64 MeV Level

In the case of the third level, there are several measurements^{32, 33, 35, 36, 39, 40)} around 14 MeV. Recently, Antolković et al.⁴¹⁾ measured the three α -correlation spectra from the $^{12}\text{C}(n, 3\alpha)n$ reaction between 10

and 35 MeV by using the nuclear emulsion, and they deduced the excitation function for the inelastic scattering to the third excited state of ^{12}C with kinematical analysis. The evaluation was done on the basis of their data by smoothing them.

The angular distribution was calculated with DWBA, as described in the above subsection.

4.4 Continuous Levels

The inelastic scattering to the excited states of ^{12}C higher than 10.3 MeV and other reactions which lead to the final state of $3\alpha + n$ were considered as the inelastic scattering to the continuous levels. Antolković et al.⁴¹⁾ measured the $(n,3\alpha)n$ cross section in a kinematically complete experiment, and their data are consistent with the old works^{42,43)}. Owing to the experimental energy cut-off, however, the events due to the decay via the second excited state of ^{12}C (7.65 MeV) were unable to be detected. Therefore, we considered the contribution from the continuum as the difference between the measured $^{12}\text{C}(n,3\alpha)n$ cross section and the $^{12}\text{C}(n,n')^{12}\text{C}^*$ (9.64 MeV) cross section evaluated above.

The angular distribution was assumed to be isotropic in CM. As the energy distribution the evaporation spectrum was assumed. The value of nuclear temperature θ was determined on the basis of the OKTAVIAN data⁴⁴⁾ at 14.7 MeV. For other energies the following expression was assumed:

$$\theta = (E_n/a)^{1/2}, \quad (20)$$

where a is a constant.

Figures 11-16 show the evaluated cross sections. For the inelastic scattering to the first excited state, ENDF/B-V gives a fine structure around 14.8 MeV as shown in Fig. 11. This structure comes from some experimental data^{32,33,45)}. However, there is no such a structure from the excitation functions obtained by Morgan et al.³⁰⁾ and Rogers et al.³¹⁾. Thus, it has not been taken into account in the present work.

In Figs. 15 and 16, are shown the angular distributions at 14 MeV by comparing with ENDF/B-V and experimental data^{32,33,39,40,44,46)}. The calculated angular distribution for the inelastic scattering to the second excited state (7.65 MeV) is in good agreement with the most recent data of Takahashi et al.⁴⁴⁾, as shown in Fig. 15. On the other hand, it was found that the DWBA result did not reproduce satisfactorily the whole pattern of the data of Takahashi et al. in the case of the third excited state (9.64 MeV).

5. Radiative Capture Reaction

As the thermal cross section we adopted a value of 3.53 mb which was recommended in BNL-325¹⁸⁾. The cross section was extrapolated as $1/v$ up to 100 keV, i.e.,

$$\sigma_{n,\gamma} = 5.61 \times 10^{-4} [E_n \text{ (eV)}]^{-1/2} \text{ (barns)}. \quad (21)$$

Above 100 keV, the inverse reaction data of Cook⁴⁷⁾ were added by using the detailed balance. The result is shown in Fig. 17 together with experimental data^{48,49)} and the evaluated data in ENDF/B-IV and -V. It is noted that the (n,γ) cross section in ENDF/B-IV is equal to zero above 4.0 keV.

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6. The $^{12}\text{C}(n,p)^{12}\text{B}$ Reaction

Rimmer and Fisher⁵⁰⁾ measured the excitation function in the energy range of 14.5 MeV to 22 MeV by the activation method. Bobyr et al.⁵¹⁾ also measured the cross section from 16 MeV to 18 MeV by the same method, but their data are twice as large as those of Rimmer and Fisher. Since the measured data of Rimmer and Fisher covered the whole energy range which was required, we adopted them as the (n,p) cross section for the present. The evaluated curve is shown in Fig. 18.

7. The $^{12}\text{C}(n,d)^{11}\text{B}$ Reaction

There are no available data on the (n,d) reaction but the inverse reaction data. Hence, the (n,d) cross section was calculated with DWBA by assuming the proton pickup mechanism. As the neutron potential, the same parameters described in Sect. 4.2 were employed. Concerning the deuteron potential we used the parameters of Fuchs et al.⁵²⁾, and they are listed in Table III. The bound state wave-function for the $p + ^{11}\text{B}$ system was calculated by the conventional separation-energy method, and the form factor parameters are given in Table IV. Normalization was taken so that the cross section at 17.5 MeV might give a value of 26 mb which was estimated from the inverse reaction data⁵³⁾. The calculated result is shown in Fig. 19.

8. The $^{12}\text{C}(n,\alpha)^9\text{Be}$ Reaction

The (n, α) reactions leading to the excited states of ^9Be contribute to the (n,n' 3α) reaction. Thus, only the evaluation on the (n, α_0) reaction is needed here. Available experimental data are the following:

6. The $^{12}\text{C}(n,p)^{12}\text{B}$ Reaction

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7. The $^{12}\text{C}(n,d)^{11}\text{B}$ Reaction

There are no available data on the (n,d) reaction but the inverse reaction data. Hence, the (n,d) cross section was calculated with DWBA by assuming the proton pickup mechanism. As the neutron potential, the same parameters described in Sect. 4.2 were employed. Concerning the deuteron potential we used the parameters of Fuchs et al.⁵²⁾, and they are listed in Table III. The bound state wave-function for the $p + ^{11}\text{B}$ system was calculated by the conventional separation-energy method, and the form factor parameters are given in Table IV. Normalization was taken so that the cross section at 17.5 MeV might give a value of 26 mb which was estimated from the inverse reaction data⁵³⁾. The calculated result is shown in Fig. 19.

8. The $^{12}\text{C}(n,\alpha)^9\text{Be}$ Reaction

The (n, α) reactions leading to the excited states of ^9Be contribute to the (n,n' 3α) reaction. Thus, only the evaluation on the (n, α_0) reaction is needed here. Available experimental data are the following:

6. The $^{12}\text{C}(n,p)^{12}\text{B}$ Reaction

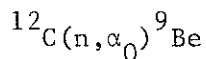
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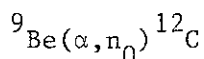
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Chatterjee and Sen ⁵⁴⁾	(1964); 14.5 MeV,
Huck et al. ⁵⁵⁾	(1966); 16 and 17 MeV,
Brendle et al. ⁵⁶⁾	(1968); 13.9 and 15.6 MeV,
Kitazawa and Yamamuro ⁵⁷⁾	(1969); 14.1 MeV,
Kardonsky et al. ⁵⁸⁾	(1971); 14.3 MeV,
Stevens ⁵⁹⁾	(1976); 18 ~ 22 MeV,



Retz-Schmidt et al. ⁶⁰⁾	(1960); 7.6 ~ 10.4 MeV [*] ,
Verbinski et al. ⁶¹⁾	(1968); 11.3 ~ 13.6 MeV [*] ,
Obst et al. ⁶²⁾	(1972); 9.2 ~ 11 MeV [*] .

The evaluation was done on the basis of these data by using the spline-function fitting. The evaluated curve is displayed in Fig. 20.

9. Photon Production

9.1 The $^{12}\text{C}(n, n'\gamma) ^{12}\text{C}^*$ Reaction

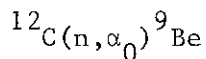
The differential cross section for the $(n, n'\gamma)$ reaction was measured by Morgan et al.³⁰⁾. The integrated cross section is the same as given in eq. (19). The second-order Legendre coefficient a_2 in eq. (18) can be obtained by neglecting the fourth-order term, i.e.,

$$a_2 = \frac{2}{5} \left[1 - \frac{d\sigma_{n, n'\gamma}}{d\Omega_\gamma} \Big|_{\theta_\gamma=90^\circ} / \frac{d\sigma_{n, n'\gamma}}{d\Omega_\gamma} \Big|_{\theta_\gamma=125^\circ} \right]. \quad (22)$$

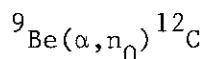
9.2 The $^{12}\text{C}(n, \gamma) ^{13}\text{C}$ Reaction

Spilling et al.⁶³⁾ measured the capture γ -ray spectrum for thermal

*) These energies correspond to the incident neutron energies.



Chatterjee and Sen ⁵⁴⁾	(1964); 14.5 MeV,
Huck et al. ⁵⁵⁾	(1966); 16 and 17 MeV,
Brendle et al. ⁵⁶⁾	(1968); 13.9 and 15.6 MeV,
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neutrons with a high-resolution Ge(Li) detector, and determined the intensities of the γ -rays. We deduced γ -ray multiplicities from their data. The result is the following:

Transition	Multiplicity
cap. \rightarrow g.s.	0.68
cap. \rightarrow 3.68 MeV	0.32
3.68 MeV \rightarrow g.s.	0.32

The angular distribution of γ -rays was assumed to be isotropic.

10. Concluding Remarks

Evaluation of neutron nuclear data for ^{12}C has been performed in the energy range from 10^{-5} eV to 20 MeV.

The R-matrix theory was employed to analyze the total cross section below 4.8 MeV. Using the best-fit R-matrix parameters, the calculated angular distribution for the elastic scattering is in good agreement with experimental data. The experimental data on the inelastic scattering to the levels higher than 7.65 MeV are very scarce. Thus, new measurements are necessary for fusion neutronics calculations.

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Table I R-matrix parameters.

ℓ	J	$E_{\lambda}^{J\pi}$ (MeV)	$\gamma_{\lambda n}^{J\pi}$ (MeV ^{1/2})	$R_{n0}^{\infty J\pi}$	$R_{n1}^{\infty J\pi}$ (MeV ⁻¹)
0	1/2	-1.862	0.816	0.0245	0.0
1	1/2	3.876	0.230	0.09	0.05
1	3/2	-1.262	0.224	0.261	0.05
		4.56	0.055	0.261	0.05
2	3/2	2.70	0.38	0.250	0.0
		3.254	0.974	0.250	0.0
2	5/2	1.911	0.13	0.065	0.0
3	5/2	2.596	0.077	0.0	0.0

a = 4.61 fm.

Table II Neutron optical-model parameters.

E_n (MeV)	V_0 (MeV)	W_s (MeV)	V_{so} (MeV)	r_0 (fm)	r_s (fm)	r_{so} (fm)	a_0 (fm)	a_s (fm)
8.5	53.5	5.17	4.4	1.26	1.29	1.10	0.33	0.30
9.0	53.5	6.20	6.1	1.26	1.28	1.10	0.33	0.30
9.5	53.5	6.50	7.1	1.26	1.28	1.10	0.34	0.30
10.0	52.9	7.50	6.0	1.25	1.25	1.10	0.34	0.30
10.5	53.5	5.75	6.0	1.20	1.25	1.10	0.33	0.30
11.0	53.3	5.75	6.0	1.20	1.25	1.05	0.34	0.30
11.5	53.1	5.75	6.0	1.20	1.25	1.05	0.35	0.30
12.0	52.8	5.00	6.5	1.25	1.25	1.05	0.36	0.30
12.5	52.7	5.75	6.5	1.25	1.25	1.05	0.36	0.30
13.0	52.6	5.75	6.0	1.25	1.25	1.05	0.36	0.30
13.5	52.4	5.75	6.0	1.25	1.25	1.05	0.36	0.30
14.0	52.4	5.75	5.5	1.20	1.25	1.05	0.40	0.35
14.5	52.4	7.30	7.0	1.20	1.25	1.03	0.42	0.35
15.0	51.7	6.05	4.2	1.20	1.25	1.00	0.46	0.36
15.85	51.6	5.75	6.0	1.20	1.25	1.00	0.46	0.40
17.27	51.3	8.00	6.0	1.20	1.25	1.00	0.55	0.40
18.25	49.5	6.45	6.0	1.20	1.25	1.00	0.56	0.40
19.88	49.1	6.45	6.0	1.20	1.25	1.00	0.56	0.40

$$a_{so} = 0.38 \text{ fm.}$$

Table III Deuteron optical-model parameters.

V_0 (MeV)	W_v (MeV)	V_{so} (MeV)	r_0 (fm)	r_v (fm)	r_{so} (fm)	r_c (fm)	a_0 (fm)	a_v (fm)	a_{so} (fm)
70.0	10.0	6.0	1.75	2.26	1.75	1.75	0.65	0.45	0.65

Table IV Form-factor parameters for the $p + {}^{11}\text{B}$ system.

r_0 (fm)	r_c (fm)	a_0 (fm)	λ (MeV)
1.3	1.3	0.5	25.0

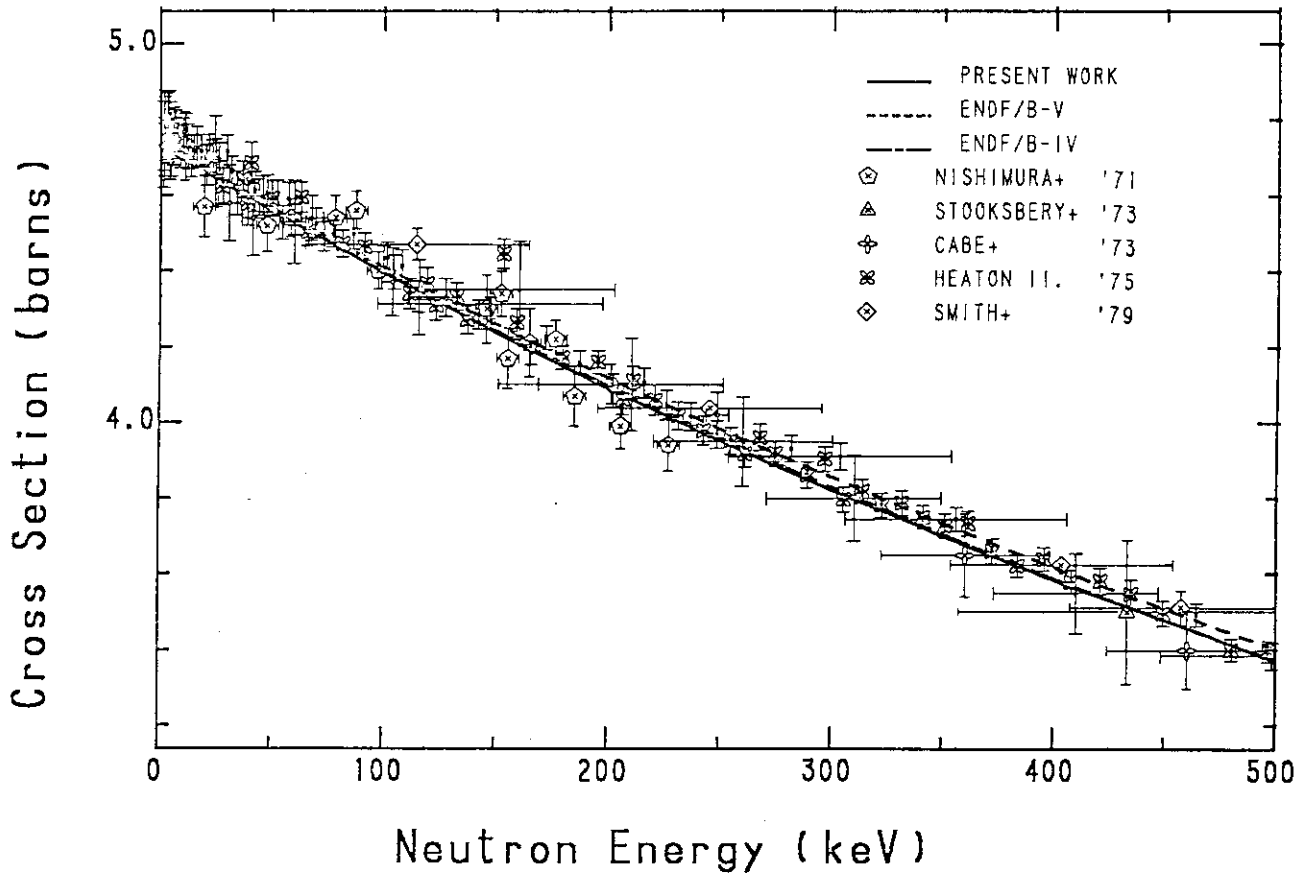


Fig. 1 Measured and evaluated total cross sections from 0 to 500 keV.

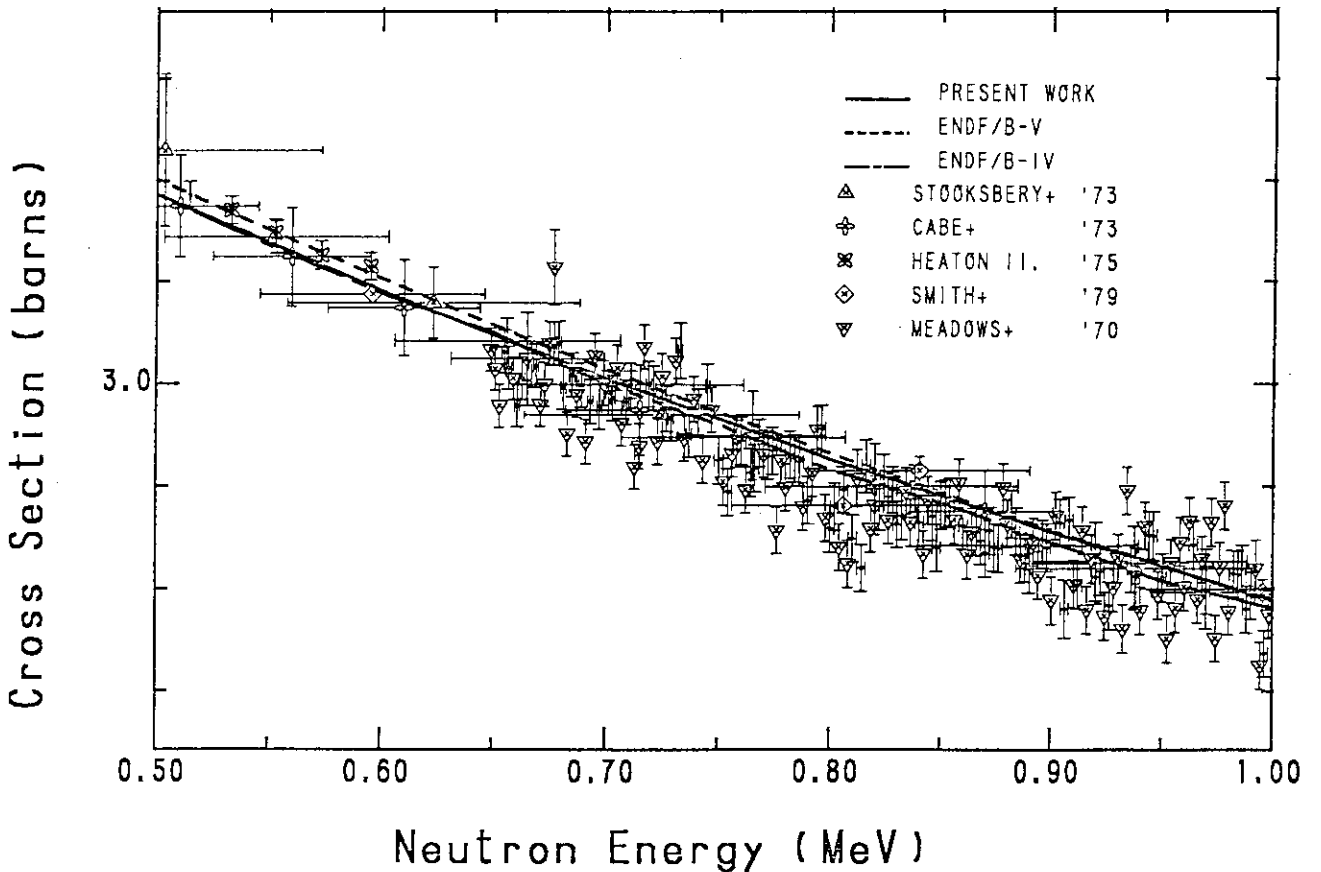


Fig. 2 Measured and evaluated total cross sections from 0.5 MeV to 1 MeV.

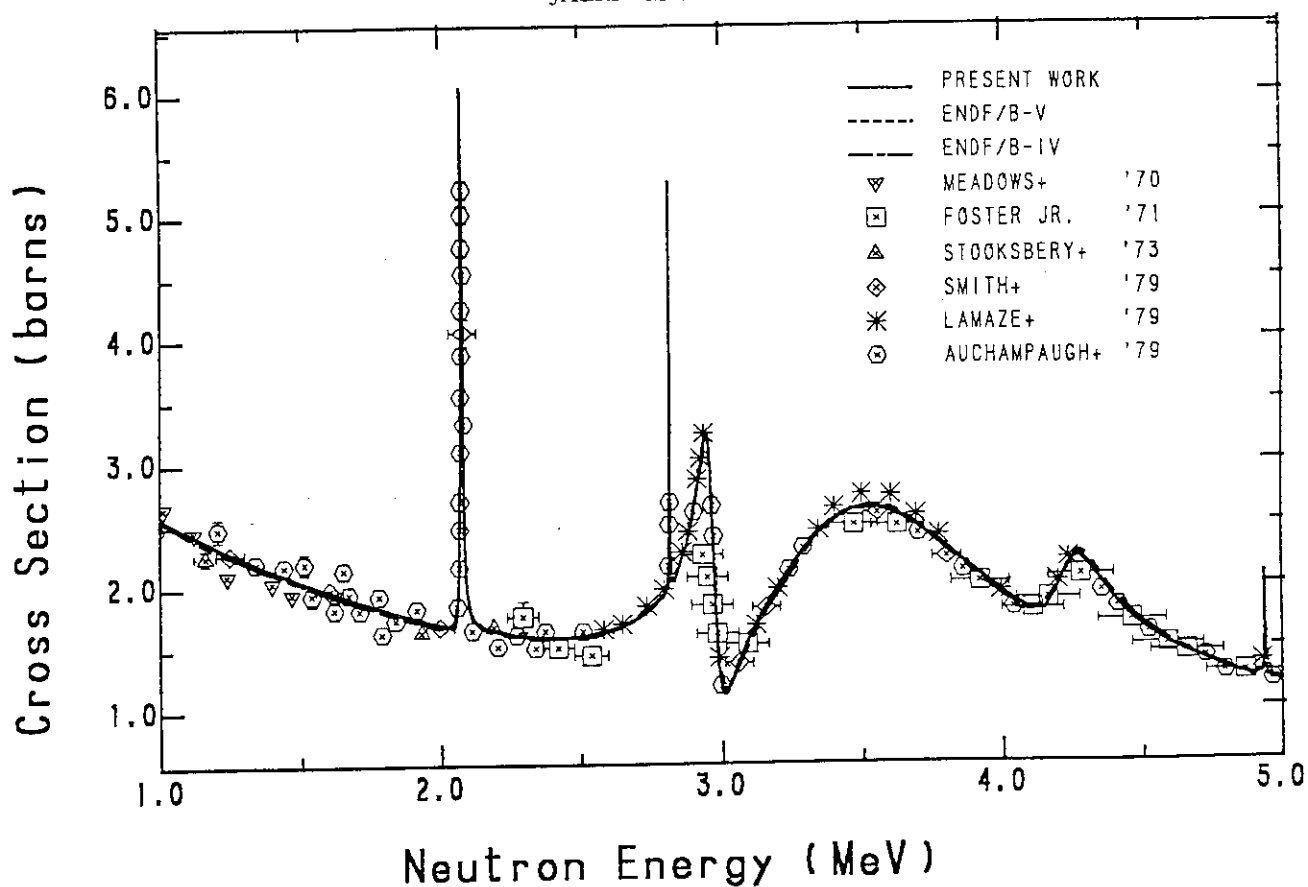


Fig. 3 Measured and evaluated total cross sections from 1 MeV to 5 MeV.

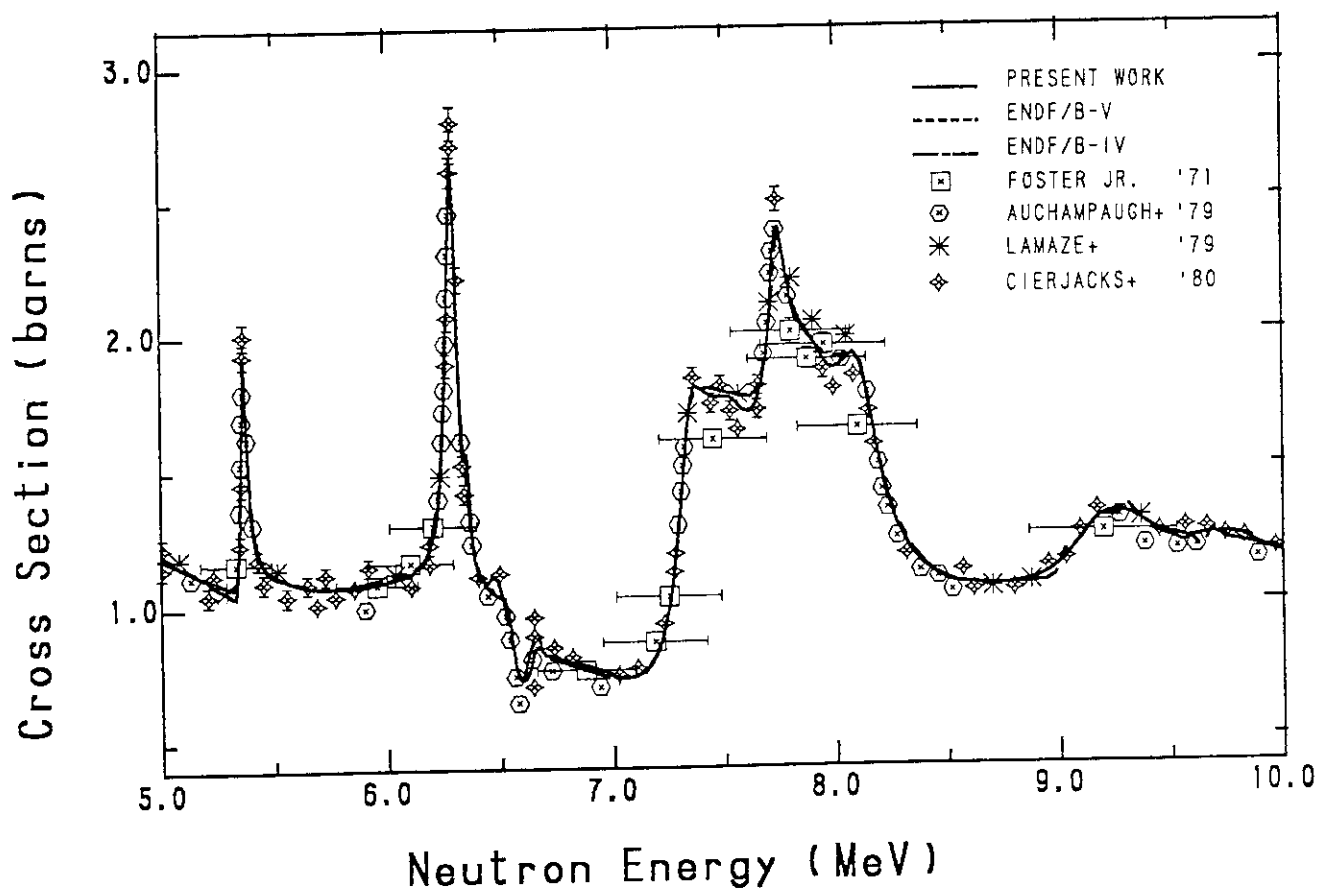


Fig. 4 Measured and evaluated total cross sections from 5 MeV to 10 MeV.

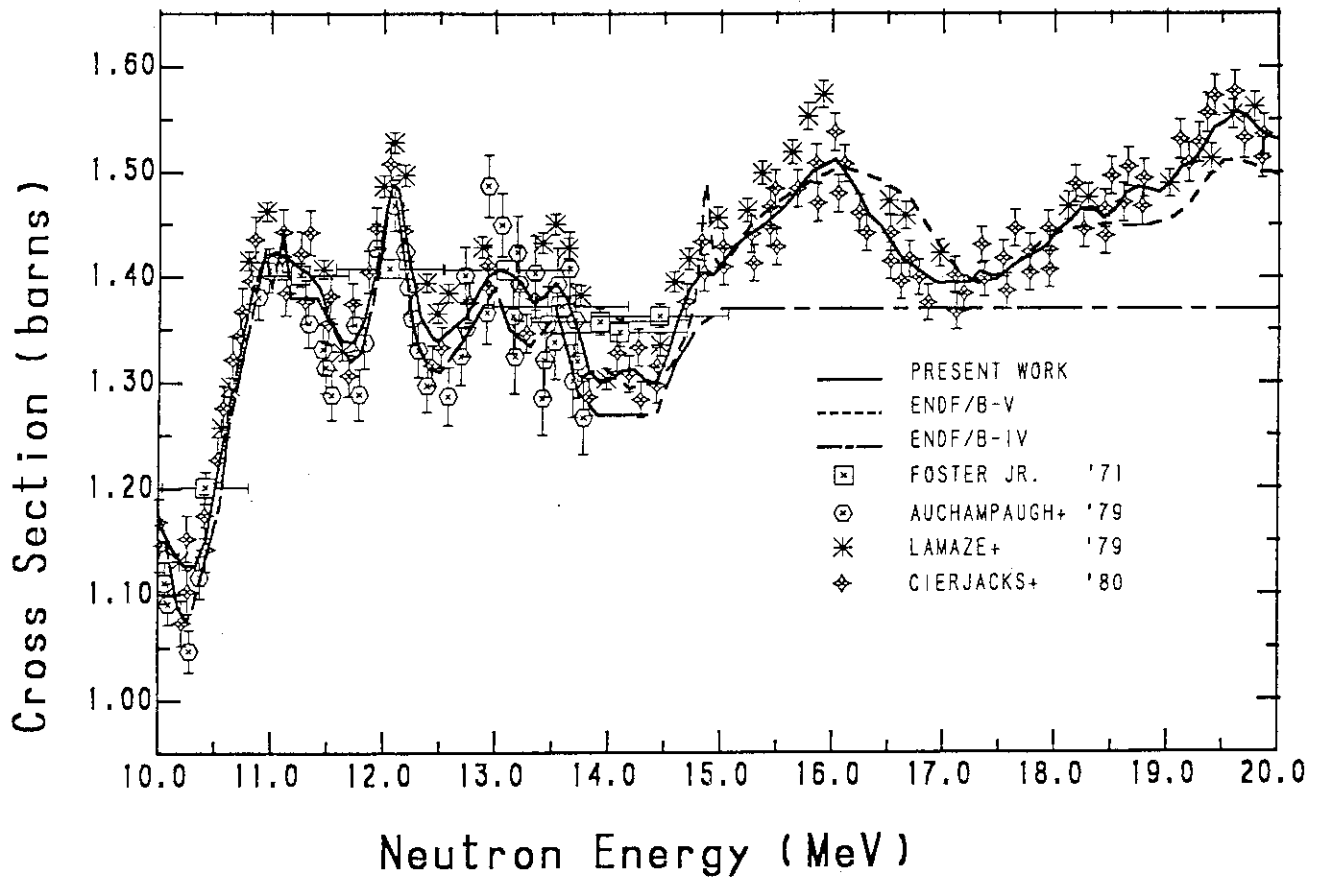


Fig. 5 Measured and evaluated total cross sections from 10 MeV to 20 MeV.

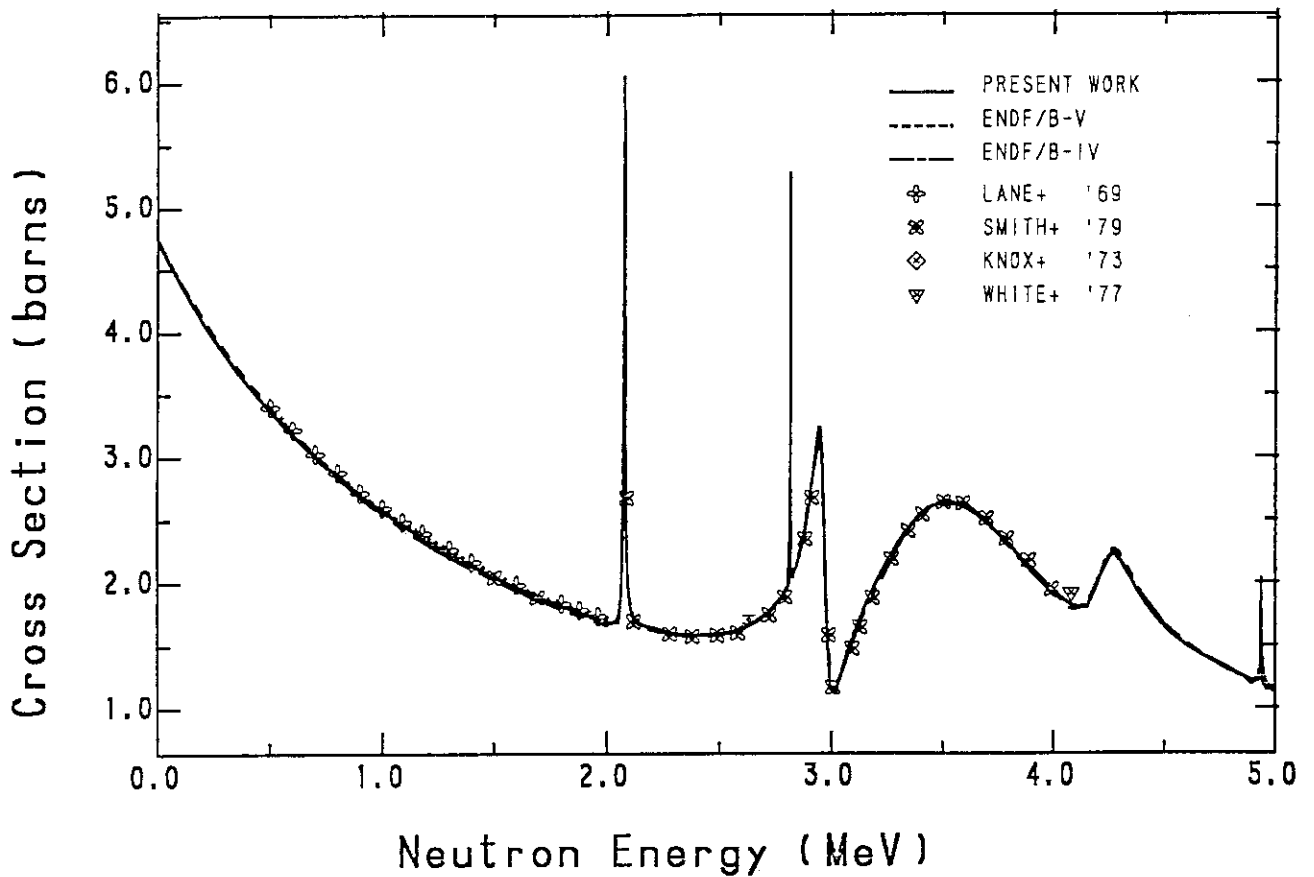


Fig. 6 Measured and evaluated elastic scattering cross sections from 0 to 5 MeV.

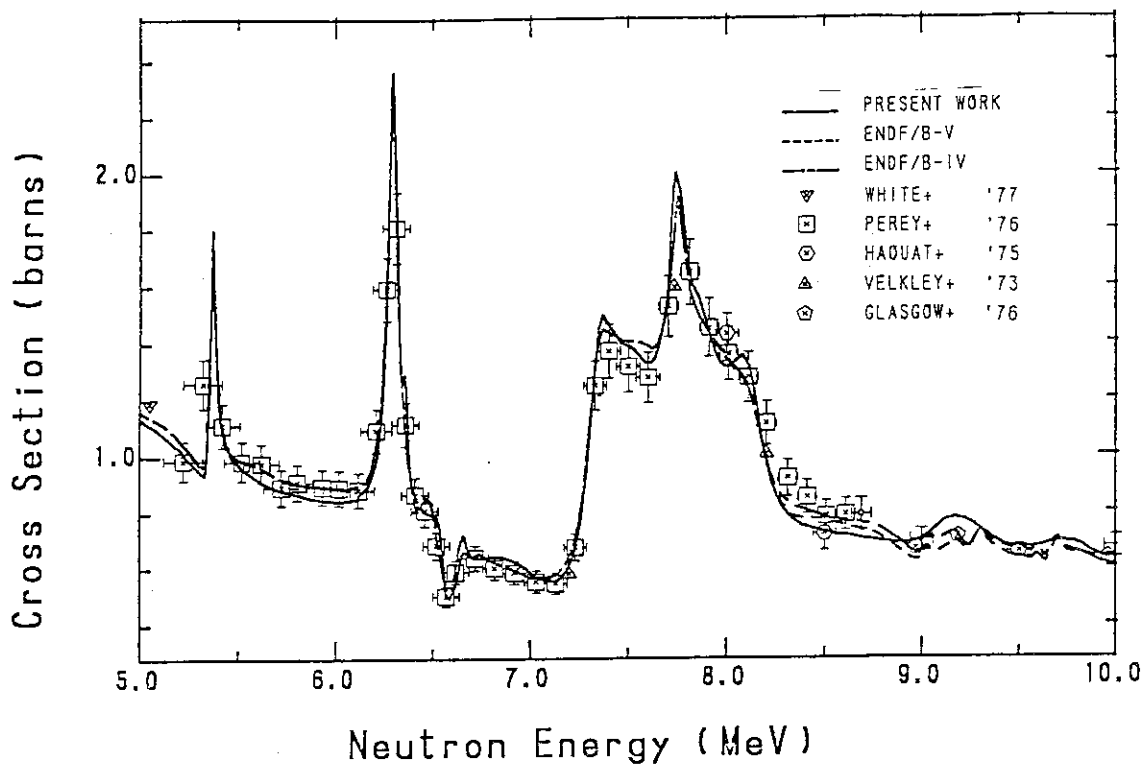


Fig. 7 Measured and evaluated elastic scattering cross sections from 5 MeV to 10 MeV.

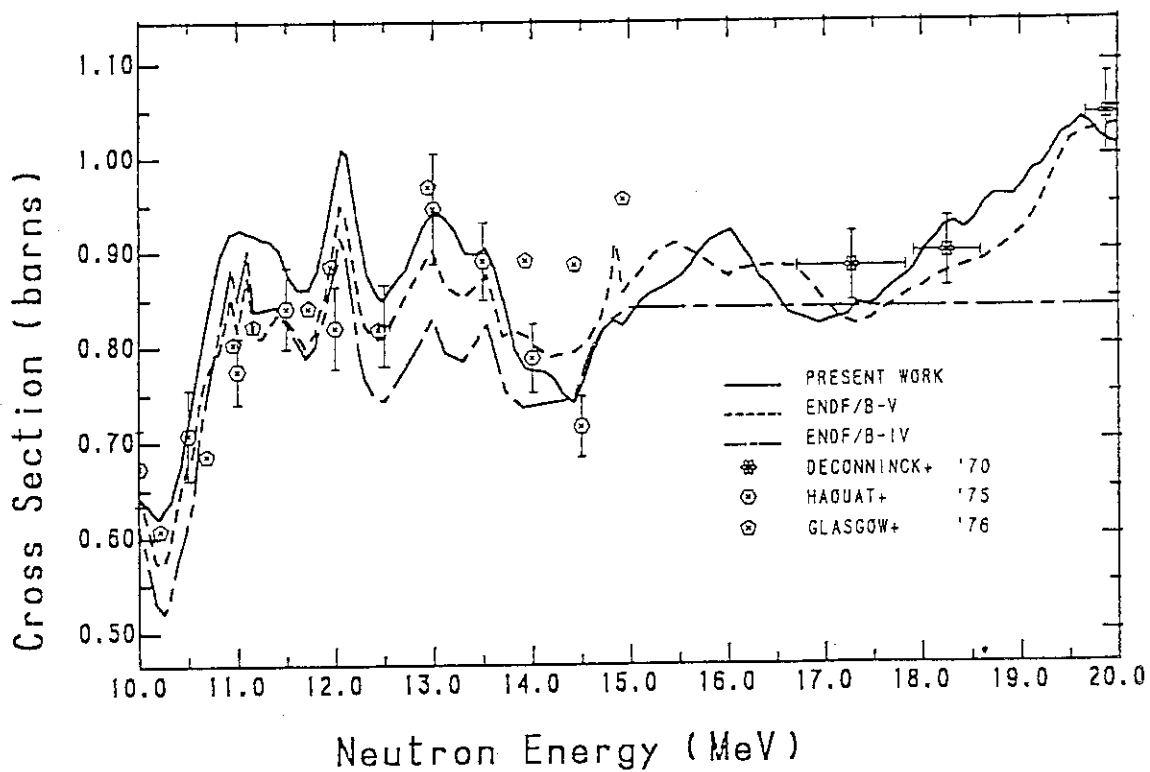
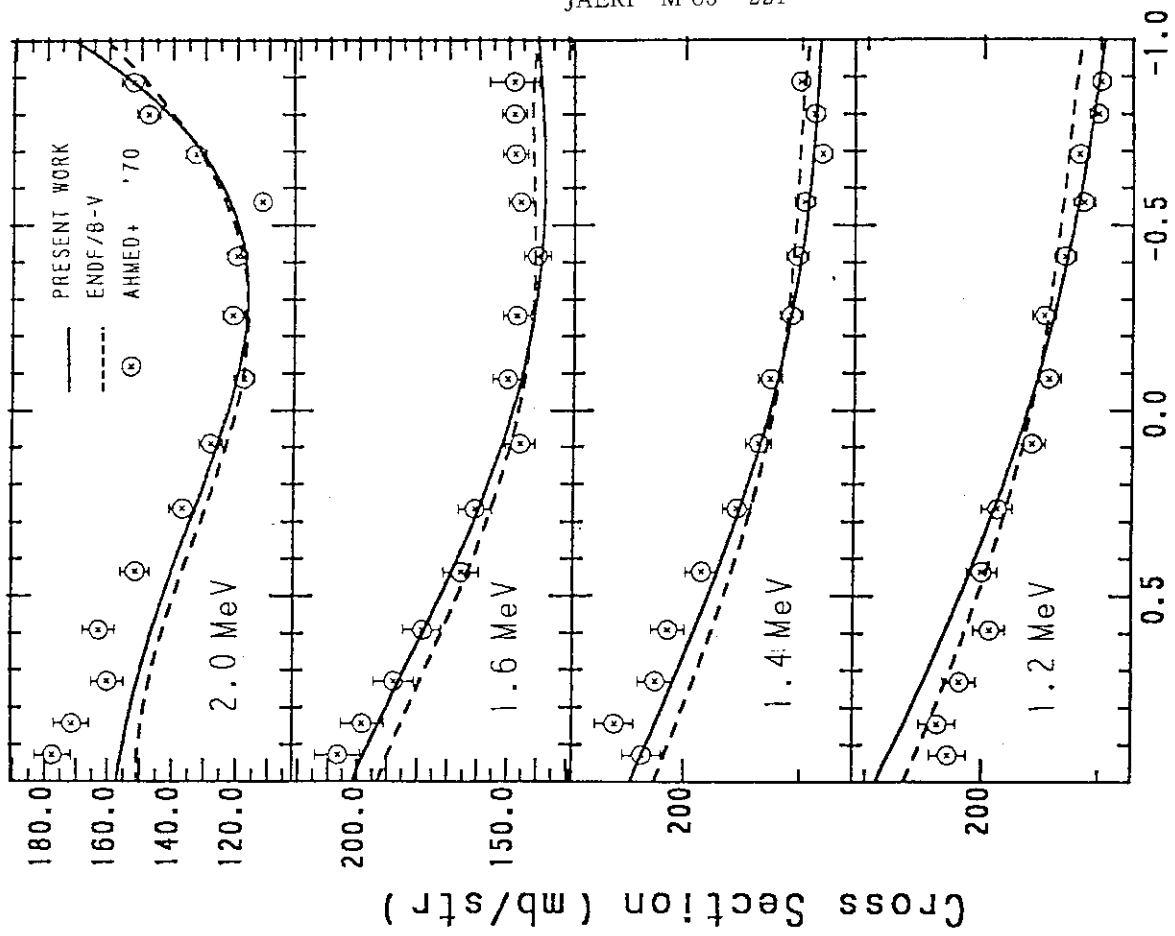
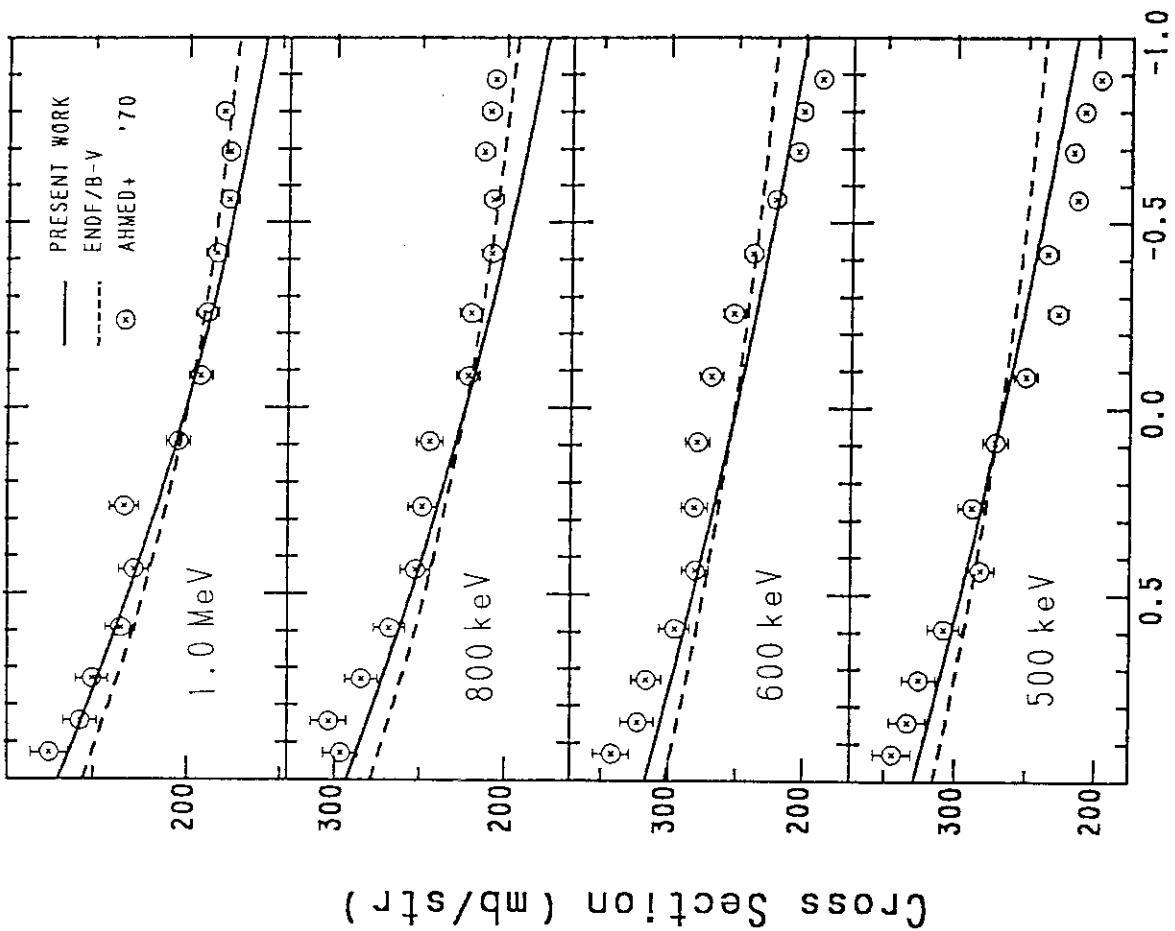


Fig. 8 Measured and evaluated elastic scattering cross sections from 10 MeV to 20 MeV.



Cosine

Fig. 10 Measured and evaluated elastic angular distributions from 1 MeV to 2 MeV.



Cosine

Fig. 9 Measured and evaluated elastic angular distributions from 0.5 MeV to 1 MeV.

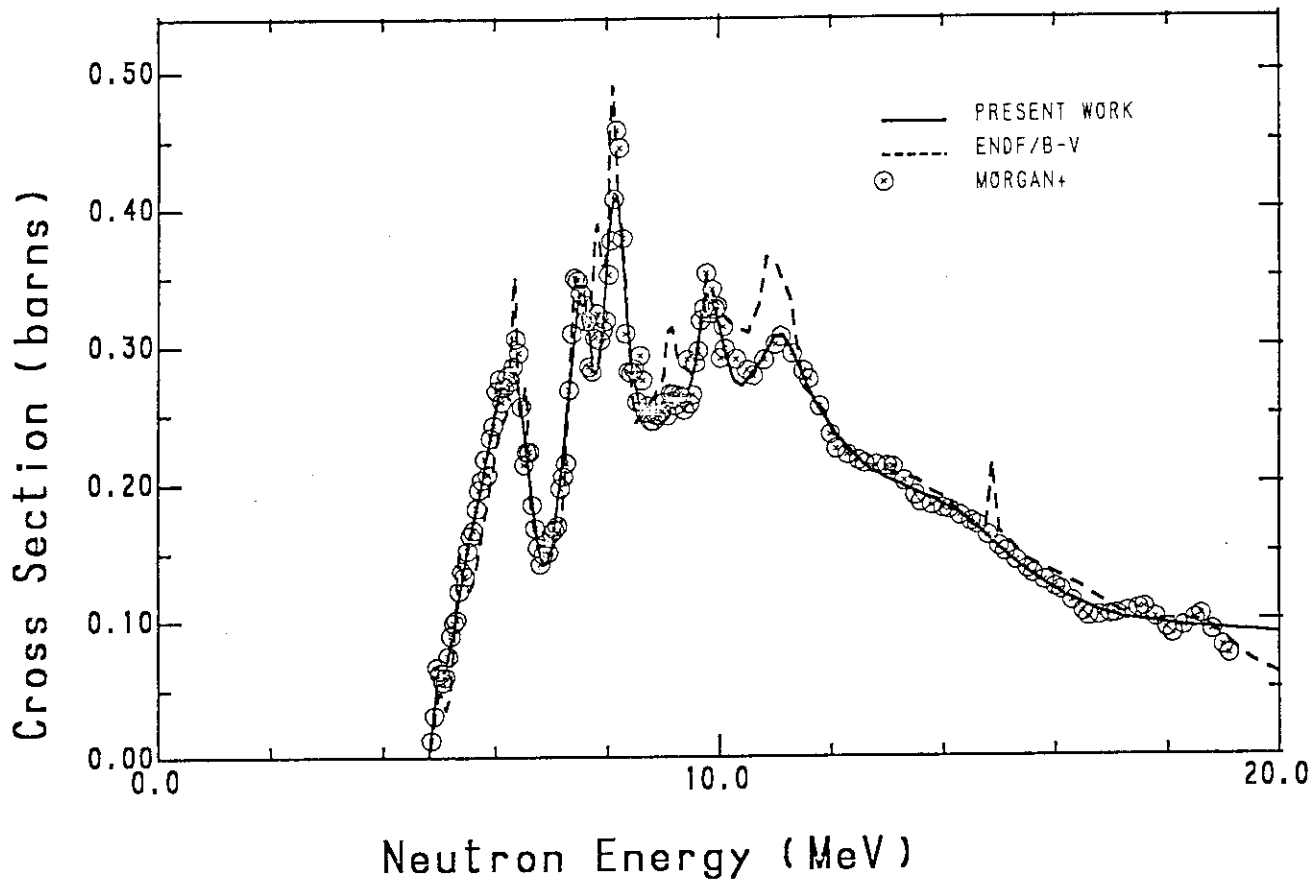


Fig. 11 Measured and evaluated (n, n_1) cross sections.

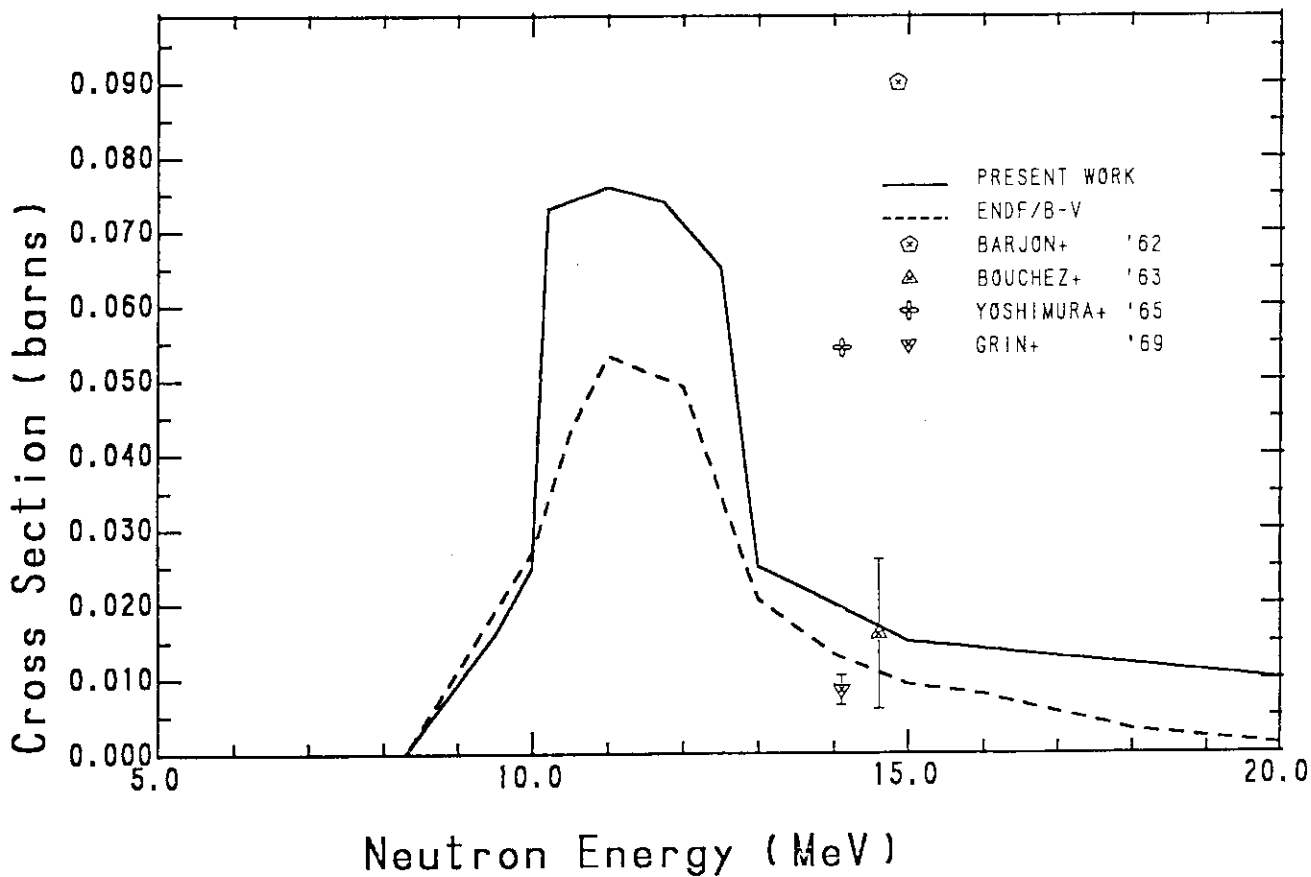


Fig. 12 Measured and evaluated (n, n_2) cross sections.

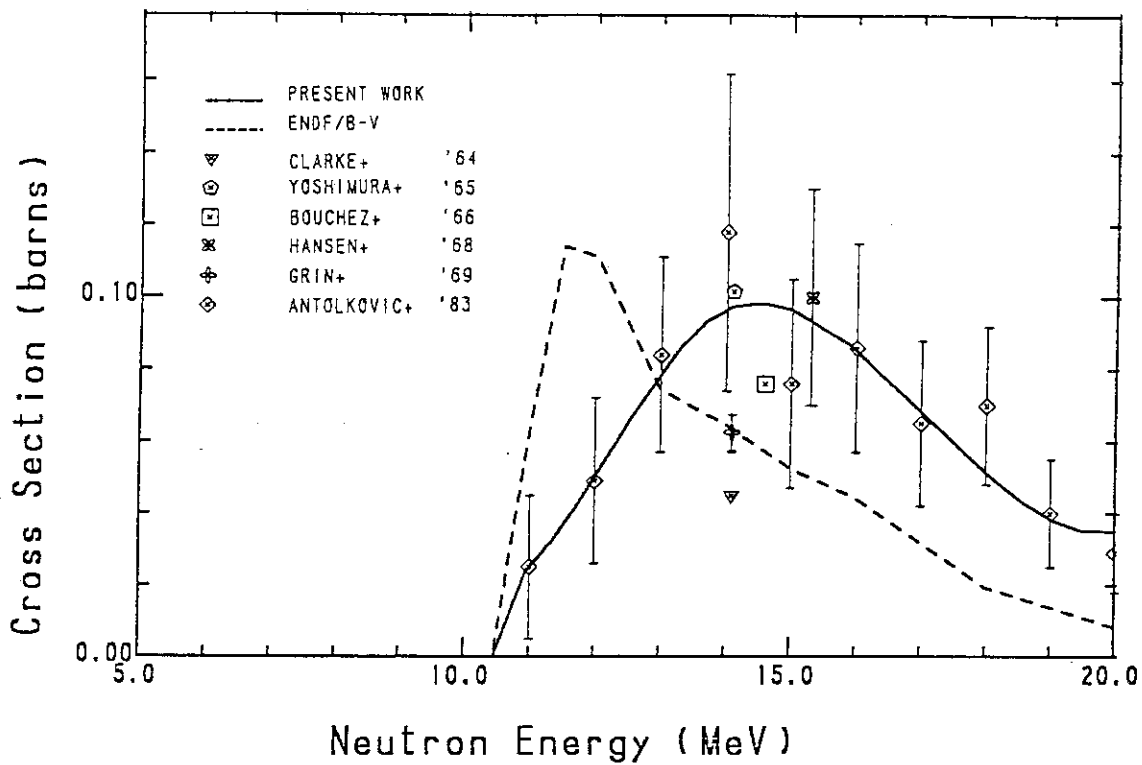


Fig. 13 Measured and evaluated (n,n_3) cross sections.

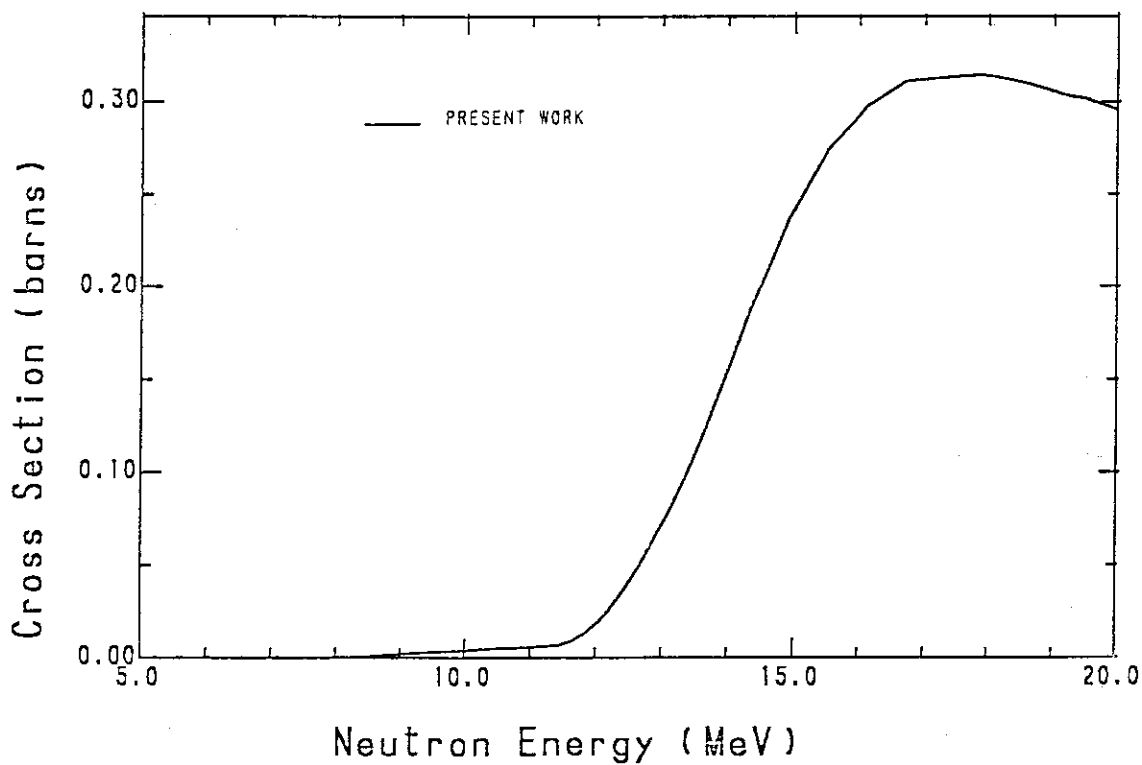


Fig. 14 Evaluated cross section for the inelastic scattering to the continuous levels.

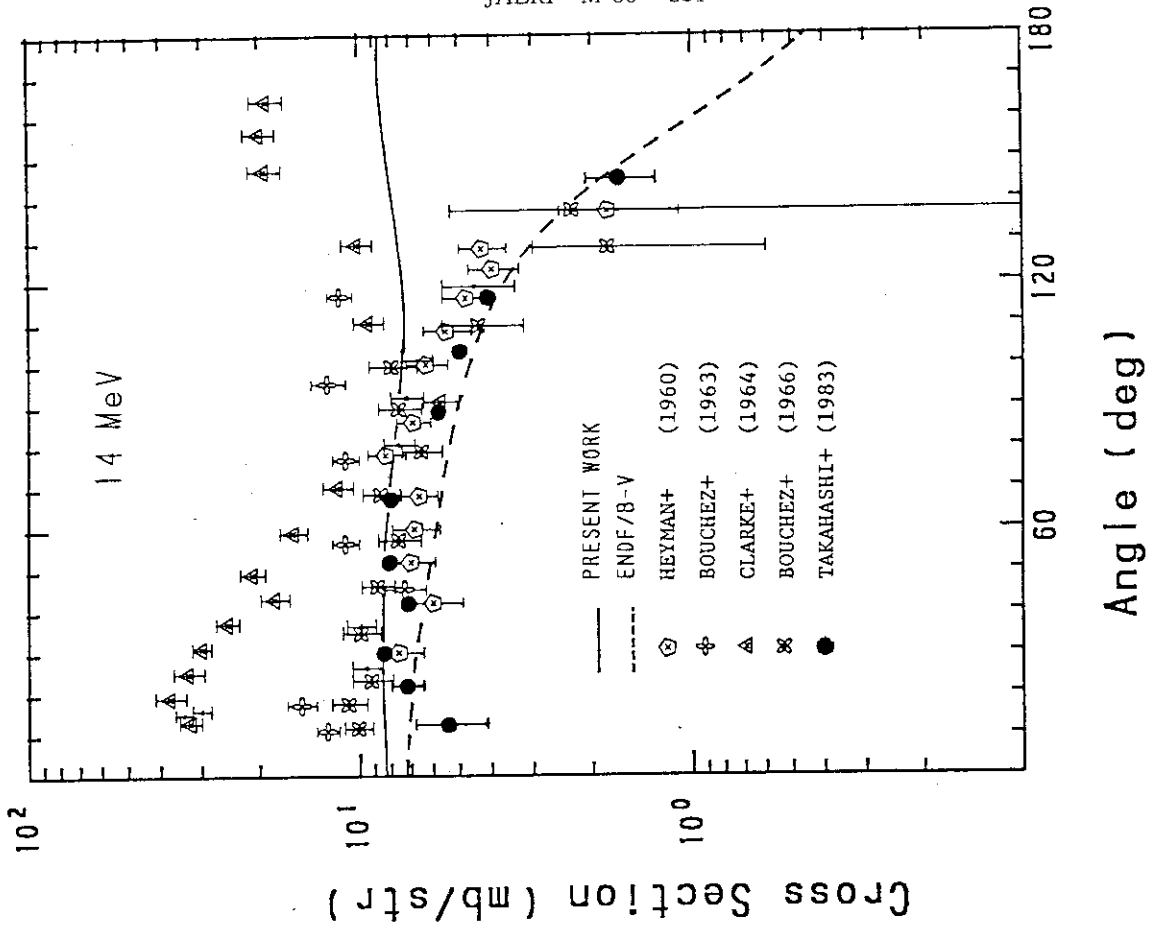


Fig. 15 Measured and evaluated angular distributions for the (n,n_2) reaction at 14 MeV.

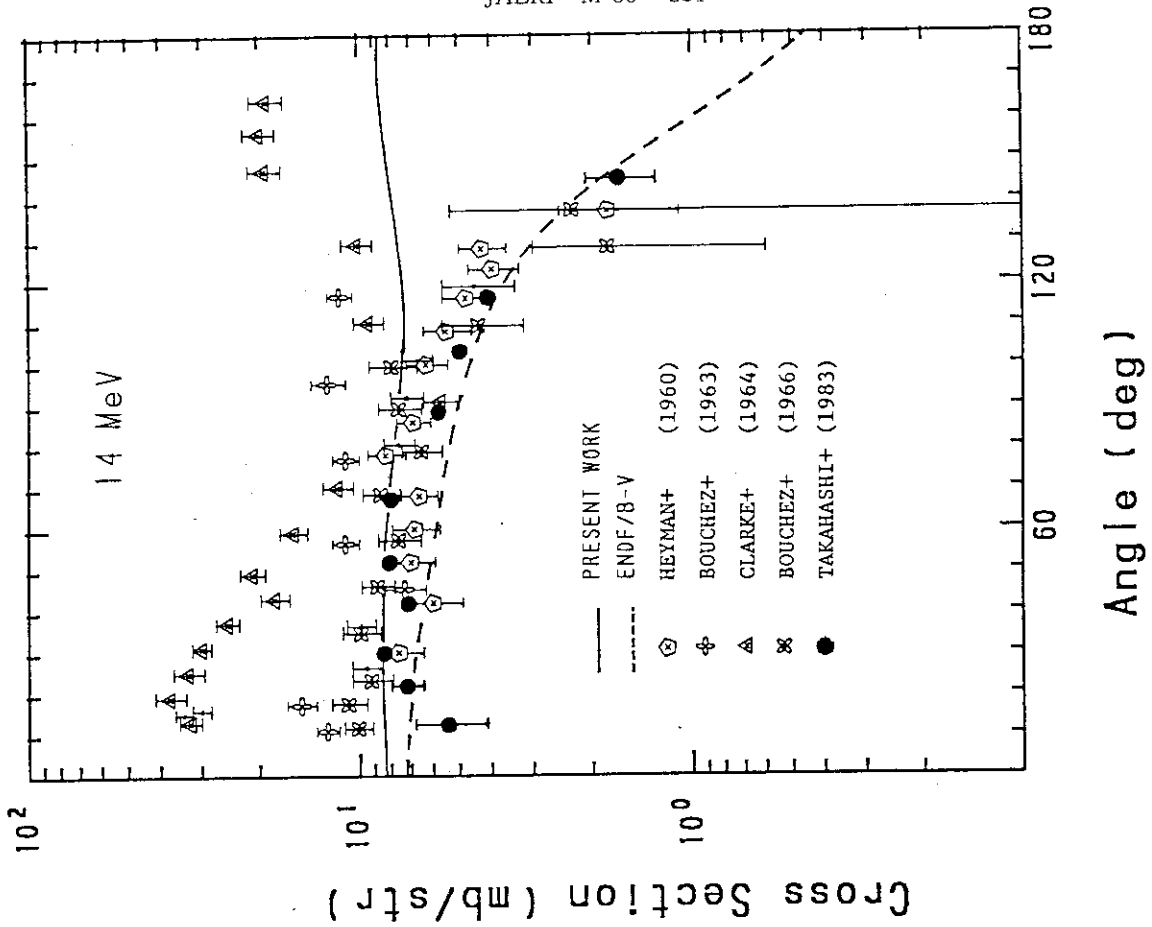


Fig. 16 Measured and evaluated angular distributions for the (n,n_3) reaction at 14 MeV.

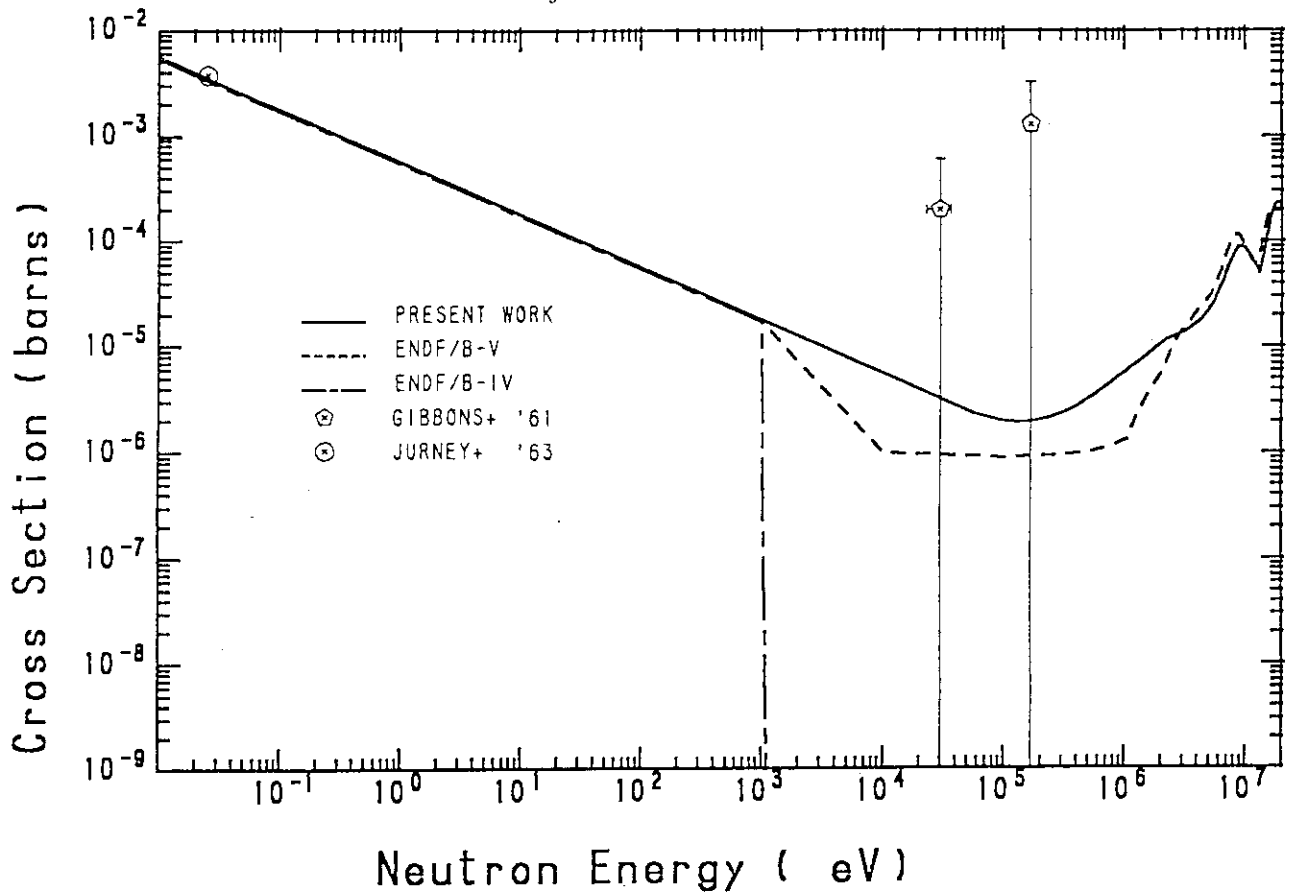


Fig. 17 Measured and evaluated capture cross sections.

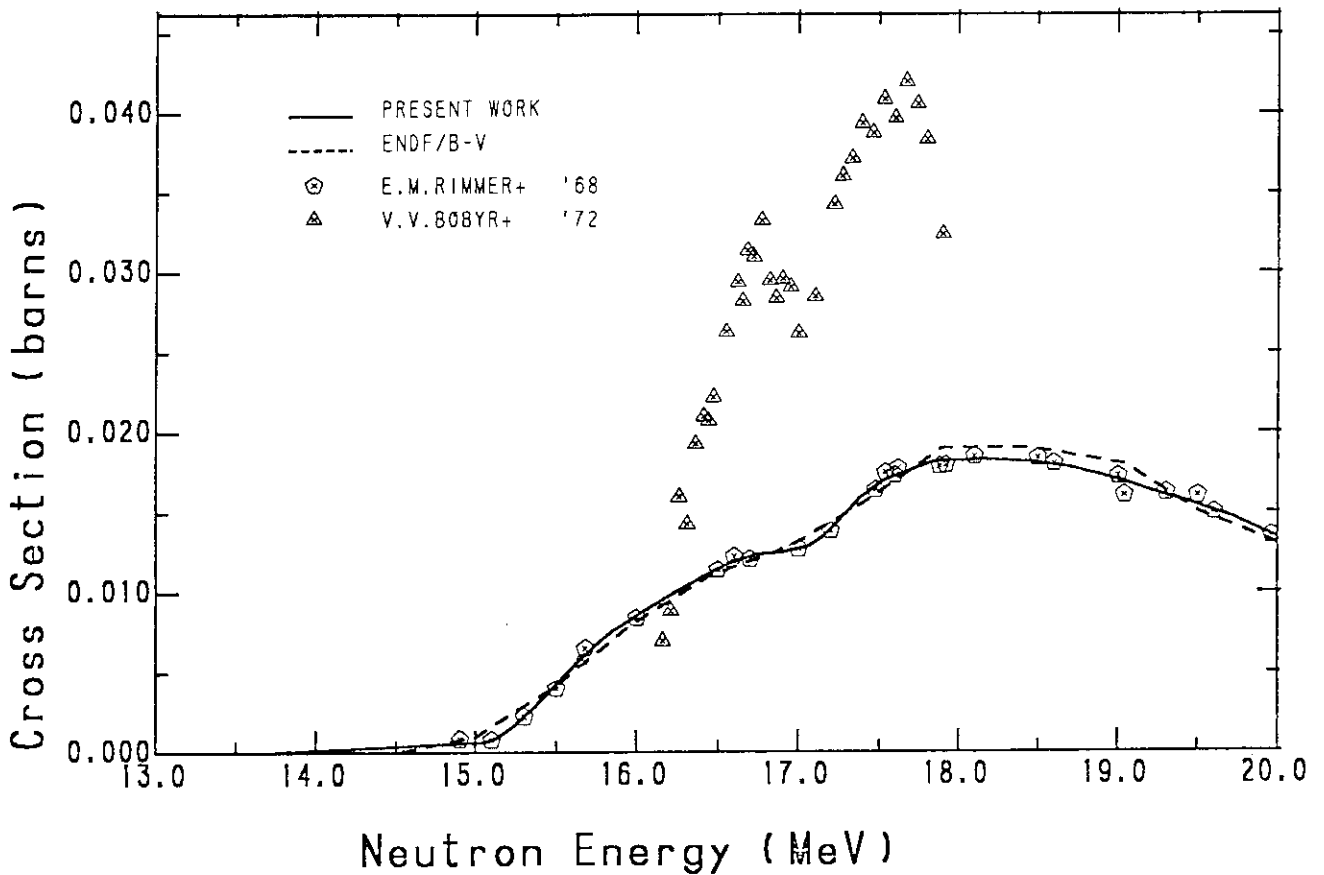


Fig. 18 Measured and evaluated (n,p) cross sections.

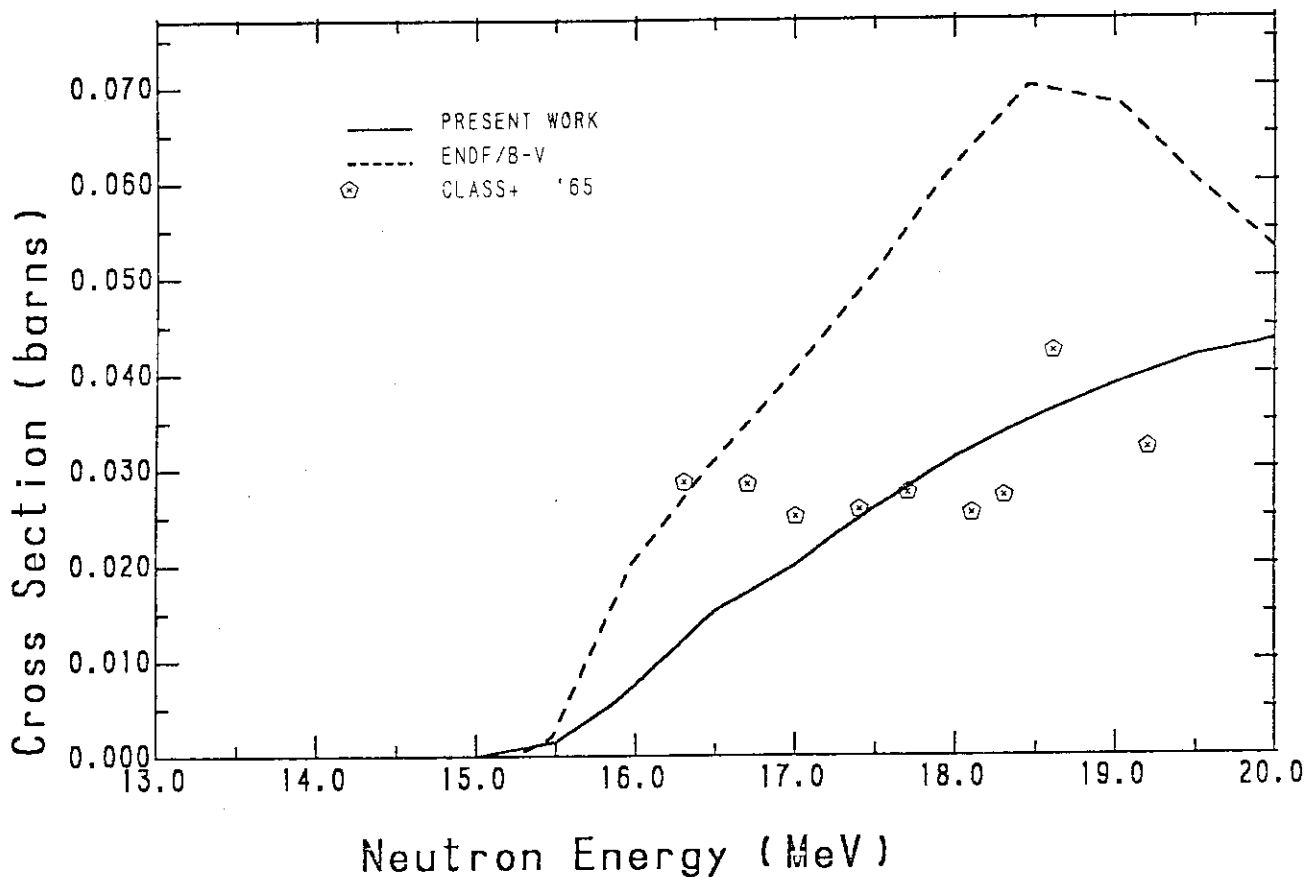


Fig. 19 Measured and evaluated (n,d) cross sections.

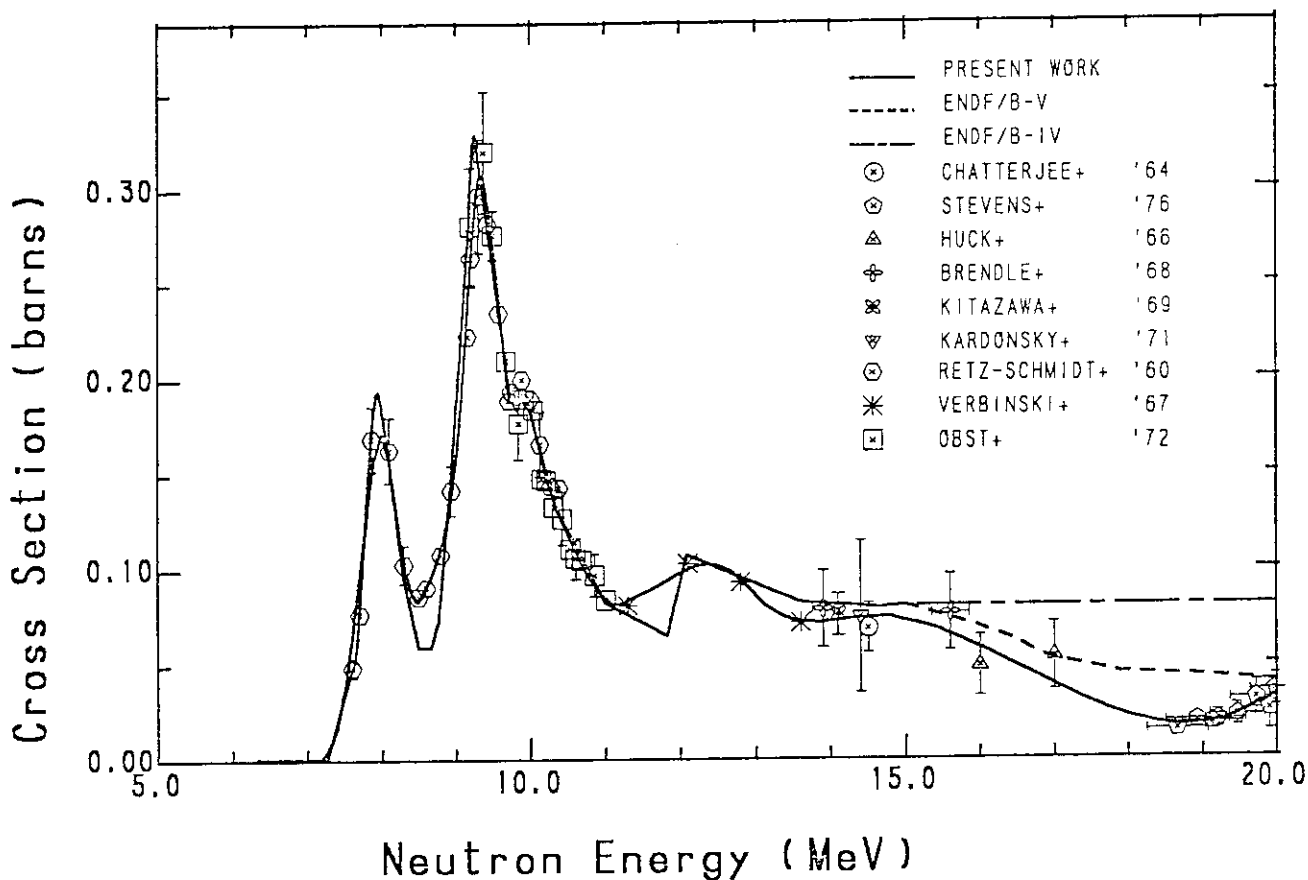


Fig. 20 Measured and evaluated (n,α) cross sections.

Appendix

List with ENDF/B format

.....10.....20.....30.....40.....50.....60.....	MAT	MF	MT	SEQ
6.01200+ 3	1.18969+ 1	0	0	0	25	612	1451	1	
0.0 + 0	0.0 + 0	0	0	1	0	612	1451	2	
						612	1451	3	
		1	451	28		612	1451	4	
		2	151	4		612	1451	5	
		3	1	191		612	1451	6	
		3	2	285		612	1451	7	
		3	3	132		612	1451	8	
		3	4	45		612	1451	9	
		3	51	30		612	1451	10	
		3	52	7		612	1451	11	
		3	53	9		612	1451	12	
		3	91	14		612	1451	13	
		3	102	23		612	1451	14	
		3	103	14		612	1451	15	
		3	104	9		612	1451	16	
		3	107	30		612	1451	17	
		3	251	97		612	1451	18	
		4	2	593		612	1451	19	
		4	51	62		612	1451	20	
		4	52	169		612	1451	21	
		4	53	133		612	1451	22	
		4	91	10		612	1451	23	
		5	91	11		612	1451	24	
		12	51	4		612	1451	25	
		12	102	13		612	1451	26	
		14	51	79		612	1451	27	
		14	102	1		612	1451	28	
						612	1 0	29	
						612	0 0	30	
6.01200+ 3	1.18969+ 1	0	0	1	0	612	2151	31	
6.01200+ 3	1.00000+ 0	0	0	1	0	612	2151	32	
1.00000- 5	1.00000+ 5	0	0	0	0	612	2151	33	
0.0 + 0	6.30000- 1	0	0	0	0	612	2151	34	
						612	2 0	35	
						612	0 0	36	
6.01200+ 3	1.18969+ 1	0	0	0	0	612	3 1	37	
0.0 + 0	0.0 + 0	0	0	2	562	612	3 1	38	
	16	5	562	2	0	612	3 1	39	
1.00000- 5	4.92356+ 0	1.00000- 4	4.80215+ 0	1.00000- 3	4.76376+ 0	612	3 1	40	
1.00000- 2	4.75161+ 0	2.53000- 2	4.74953+ 0	1.00000- 1	4.74778+ 0	612	3 1	41	
1.00000+ 0	4.74656+ 0	5.00000+ 0	4.74625+ 0	1.00000+ 1	4.74608+ 0	612	3 1	42	
1.00000+ 2	4.74574+ 0	1.00000+ 3	4.74233+ 0	5.00000+ 3	4.72724+ 0	612	3 1	43	
1.00000+ 4	4.70850+ 0	1.50000+ 4	4.68990+ 0	2.00000+ 4	4.67144+ 0	612	3 1	44	
2.50000+ 4	4.65313+ 0	3.00000+ 4	4.63495+ 0	3.50000+ 4	4.61691+ 0	612	3 1	45	
4.00000+ 4	4.59900+ 0	5.00000+ 4	4.56359+ 0	6.00000+ 4	4.52869+ 0	612	3 1	46	
7.00000+ 4	4.49431+ 0	8.00000+ 4	4.46043+ 0	9.00000+ 4	4.42703+ 0	612	3 1	47	
1.00000+ 5	4.39410+ 0	1.50000+ 5	4.23626+ 0	2.00000+ 5	4.08885+ 0	612	3 1	48	
2.50000+ 5	3.95082+ 0	3.00000+ 5	3.82125+ 0	3.50000+ 5	3.69936+ 0	612	3 1	49	

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
4.00000+	5	3.58441+	0	5.00000+	5	3.37302+	0	6.00000+	5	3.18294+	0	612	3	1	50
7.00000+	5	3.01089+	0	8.00000+	5	2.85427+	0	9.00000+	5	2.71095+	0	612	3	1	51
1.00000+	6	2.57928+	0	1.10000+	6	2.45780+	0	1.15000+	6	2.40055+	0	612	3	1	52
1.20000+	6	2.34545+	0	1.25000+	6	2.29239+	0	1.30000+	6	2.24128+	0	612	3	1	53
1.35000+	6	2.19203+	0	1.40000+	6	2.14458+	0	1.45000+	6	2.09884+	0	612	3	1	54
1.50000+	6	2.05477+	0	1.55000+	6	2.01232+	0	1.60000+	6	1.97144+	0	612	3	1	55
1.65000+	6	1.93211+	0	1.70000+	6	1.89430+	0	1.75000+	6	1.85798+	0	612	3	1	56
1.80000+	6	1.82313+	0	1.85000+	6	1.78972+	0	1.90000+	6	1.75770+	0	612	3	1	57
1.95000+	6	1.72712+	0	2.00000+	6	1.69946+	0	2.01000+	6	1.69519+	0	612	3	1	58
2.02000+	6	1.69231+	0	2.03000+	6	1.69238+	0	2.04000+	6	1.69965+	0	612	3	1	59
2.05000+	6	1.72822+	0	2.06000+	6	1.84469+	0	2.06100+	6	1.87047+	0	612	3	1	60
2.06200+	6	1.90153+	0	2.06300+	6	1.93926+	0	2.06400+	6	1.98553+	0	612	3	1	61
2.06500+	6	2.04285+	0	2.06600+	6	2.11463+	0	2.06700+	6	2.20563+	0	612	3	1	62
2.06800+	6	2.32242+	0	2.06900+	6	2.47426+	0	2.07000+	6	2.67405+	0	612	3	1	63
2.07100+	6	2.93939+	0	2.07200+	6	3.29274+	0	2.07300+	6	3.75803+	0	612	3	1	64
2.07400+	6	4.34709+	0	2.07500+	6	5.02595+	0	2.07600+	6	5.66576+	0	612	3	1	65
2.07700+	6	6.04489+	0	2.07800+	6	5.99467+	0	2.07900+	6	5.56590+	0	612	3	1	66
2.08000+	6	4.96484+	0	2.08100+	6	4.36972+	0	2.08200+	6	3.86196+	0	612	3	1	67
2.08300+	6	3.45622+	0	2.08400+	6	3.13988+	0	2.08500+	6	2.89430+	0	612	3	1	68
2.08600+	6	2.70256+	0	2.08700+	6	2.55133+	0	2.08800+	6	2.43061+	0	612	3	1	69
2.08900+	6	2.33306+	0	2.09000+	6	2.25327+	0	2.09100+	6	2.18725+	0	612	3	1	70
2.09200+	6	2.13205+	0	2.09300+	6	2.08544+	0	2.09400+	6	2.04571+	0	612	3	1	71
2.09500+	6	2.01157+	0	2.09600+	6	1.98200+	0	2.09700+	6	1.95621+	0	612	3	1	72
2.09800+	6	1.93356+	0	2.09900+	6	1.91356+	0	2.10000+	6	1.89578+	0	612	3	1	73
2.11000+	6	1.78967+	0	2.12000+	6	1.74151+	0	2.13000+	6	1.71396+	0	612	3	1	74
2.14000+	6	1.69572+	0	2.15000+	6	1.68241+	0	2.16000+	6	1.67198+	0	612	3	1	75
2.17000+	6	1.66341+	0	2.18000+	6	1.65609+	0	2.19000+	6	1.64969+	0	612	3	1	76
2.20000+	6	1.64398+	0	2.25000+	6	1.62193+	0	2.30000+	6	1.60684+	0	612	3	1	77
2.35000+	6	1.59705+	0	2.40000+	6	1.59248+	0	2.45000+	6	1.59366+	0	612	3	1	78
2.50000+	6	1.60157+	0	2.55000+	6	1.61765+	0	2.60000+	6	1.64401+	0	612	3	1	79
2.65000+	6	1.68378+	0	2.70000+	6	1.74202+	0	2.72000+	6	1.77228+	0	612	3	1	80
2.74000+	6	1.80770+	0	2.76000+	6	1.84944+	0	2.78000+	6	1.89913+	0	612	3	1	81
2.80000+	6	1.95986+	0	2.80100+	6	1.96338+	0	2.80200+	6	1.96699+	0	612	3	1	82
2.80300+	6	1.97071+	0	2.80400+	6	1.97458+	0	2.80500+	6	1.97864+	0	612	3	1	83
2.80600+	6	1.98299+	0	2.80700+	6	1.98774+	0	2.80800+	6	1.99315+	0	612	3	1	84
2.80900+	6	1.99968+	0	2.81000+	6	2.00830+	0	2.81100+	6	2.02136+	0	612	3	1	85
2.81200+	6	2.04569+	0	2.81300+	6	2.10819+	0	2.81400+	6	2.39819+	0	612	3	1	86
2.81500+	6	5.26695+	0	2.81600+	6	2.47052+	0	2.81700+	6	2.15130+	0	612	3	1	87
2.81800+	6	2.08656+	0	2.81900+	6	2.06536+	0	2.82000+	6	2.05737+	0	612	3	1	88
2.82100+	6	2.05476+	0	2.82200+	6	2.05477+	0	2.82300+	6	2.05622+	0	612	3	1	89
2.82400+	6	2.05855+	0	2.82500+	6	2.06144+	0	2.82600+	6	2.06474+	0	612	3	1	90
2.82700+	6	2.06832+	0	2.82800+	6	2.07213+	0	2.82900+	6	2.07612+	0	612	3	1	91
2.83000+	6	2.08025+	0	2.83200+	6	2.08889+	0	2.83400+	6	2.09795+	0	612	3	1	92
2.83600+	6	2.10737+	0	2.83800+	6	2.11711+	0	2.84000+	6	2.12717+	0	612	3	1	93
2.84500+	6	2.15368+	0	2.85000+	6	2.18217+	0	2.86000+	6	2.24566+	0	612	3	1	94
2.87000+	6	2.31929+	0	2.88000+	6	2.40533+	0	2.89000+	6	2.50663+	0	612	3	1	95
2.90000+	6	2.62638+	0	2.91000+	6	2.76719+	0	2.92000+	6	2.92792+	0	612	3	1	96
2.93000+	6	3.09463+	0	2.93500+	6	3.16731+	0	2.94000+	6	3.21854+	0	612	3	1	97
2.94500+	6	3.23101+	0	2.95000+	6	3.18303+	0	2.95500+	6	3.05403+	0	612	3	1	98
2.96000+	6	2.83544+	0	2.96500+	6	2.54211+	0	2.97000+	6	2.21307+	0	612	3	1	99
2.97500+	6	1.89638+	0	2.98000+	6	1.62876+	0	2.98500+	6	1.42592+	0	612	3	1	100
2.99000+	6	1.28600+	0	2.99500+	6	1.19821+	0	2.99800+	6	1.16518+	0	612	3	1	101
3.00000+	6	1.14972+	0	3.01000+	6	1.12771+	0	3.02000+	6	1.15836+	0	612	3	1	102
3.03000+	6	1.21057+	0	3.04000+	6	1.27005+	0	3.05000+	6	1.33055+	0	612	3	1	103
3.06000+	6	1.38947+	0	3.07000+	6	1.44588+	0	3.08000+	6	1.49958+	0	612	3	1	104

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
3.09000+	6 1.55070+	0 3.10000+	6 1.59947+	0 3.15000+	6 1.81697+	0	612	3	1 105
3.20000+	6 2.00596+	0 3.25000+	6 2.17526+	0 3.30000+	6 2.32454+	0	612	3	1 106
3.35000+	6 2.44940+	0 3.40000+	6 2.54464+	0 3.45000+	6 2.60656+	0	612	3	1 107
3.50000+	6 2.63406+	0 3.55000+	6 2.62913+	0 3.60000+	6 2.59615+	0	612	3	1 108
3.65000+	6 2.54086+	0 3.70000+	6 2.46928+	0 3.75000+	6 2.38691+	0	612	3	1 109
3.80000+	6 2.29827+	0 3.85000+	6 2.20684+	0 3.90000+	6 2.11512+	0	612	3	1 110
3.95000+	6 2.02495+	0 4.00000+	6 1.93821+	0 4.05000+	6 1.85858+	0	612	3	1 111
4.10000+	6 1.79789+	0 4.15000+	6 1.80072+	0 4.20000+	6 2.00161+	0	612	3	1 112
4.21350+	6 2.07590+	0 4.22640+	6 2.12680+	0 4.23930+	6 2.17330+	0	612	3	1 113
4.25340+	6 2.21020+	0 4.26740+	6 2.22420+	0 4.28150+	6 2.21540+	0	612	3	1 114
4.29550+	6 2.18420+	0 4.32370+	6 2.09800+	0 4.35180+	6 2.01050+	0	612	3	1 115
4.37990+	6 1.92480+	0 4.40800+	6 1.84400+	0 4.44870+	6 1.74510+	0	612	3	1 116
4.48940+	6 1.66680+	0 4.53000+	6 1.60180+	0 4.57070+	6 1.54280+	0	612	3	1 117
4.60340+	6 1.49980+	0 4.63600+	6 1.46310+	0 4.66870+	6 1.43060+	0	612	3	1 118
4.70140+	6 1.39980+	0 4.74440+	6 1.35580+	0 4.78730+	6 1.31170+	0	612	3	1 119
4.83020+	6 1.27930+	0 4.83549+	6 1.27677+	0 4.86336+	6 1.26962+	0	612	3	1 120
4.89122+	6 1.22720+	0 4.89882+	6 1.22529+	0 4.90643+	6 1.24602+	0	612	3	1 121
4.92140+	6 1.25880+	0 4.92470+	6 1.26270+	0 4.92800+	6 1.28210+	0	612	3	1 122
4.93130+	6 1.33480+	0 4.93260+	6 1.35450+	0 4.93390+	6 1.41050+	0	612	3	1 123
4.93460+	6 1.47850+	0 4.93520+	6 1.58750+	0 4.93590+	6 1.74780+	0	612	3	1 124
4.93660+	6 1.97050+	0 4.93700+	6 2.07650+	0 4.93740+	6 2.06690+	0	612	3	1 125
4.93790+	6 1.97270+	0 4.93830+	6 1.82430+	0 4.93920+	6 1.49000+	0	612	3	1 126
4.93970+	6 1.36560+	0 4.94010+	6 1.31080+	0 4.94280+	6 1.26410+	0	612	3	1 127
4.94550+	6 1.23780+	0 4.94820+	6 1.22830+	0 4.95090+	6 1.23200+	0	612	3	1 128
4.95510+	6 1.23320+	0 4.95940+	6 1.21940+	0 4.96360+	6 1.20690+	0	612	3	1 129
4.96780+	6 1.21200+	0 4.97530+	6 1.22130+	0 4.98280+	6 1.20160+	0	612	3	1 130
5.02500+	6 1.17953+	0 5.07500+	6 1.16193+	0 5.12500+	6 1.13983+	0	612	3	1 131
5.17500+	6 1.11779+	0 5.20270+	6 1.11170+	0 5.21710+	6 1.10010+	0	612	3	1 132
5.23140+	6 1.08950+	0 5.24570+	6 1.08060+	0 5.26000+	6 1.07430+	0	612	3	1 133
5.27690+	6 1.06660+	0 5.29370+	6 1.05730+	0 5.31050+	6 1.04920+	0	612	3	1 134
5.32740+	6 1.04540+	0 5.33310+	6 1.06390+	0 5.33880+	6 1.11750+	0	612	3	1 135
5.34450+	6 1.20320+	0 5.35020+	6 1.31820+	0 5.35480+	6 1.48420+	0	612	3	1 136
5.35930+	6 1.70740+	0 5.36390+	6 1.88400+	0 5.36620+	6 1.92250+	0	612	3	1 137
5.36840+	6 1.91040+	0 5.37350+	6 1.80350+	0 5.37860+	6 1.68130+	0	612	3	1 138
5.38360+	6 1.56310+	0 5.38870+	6 1.46830+	0 5.39920+	6 1.34100+	0	612	3	1 139
5.40970+	6 1.26530+	0 5.42020+	6 1.22310+	0 5.43080+	6 1.19680+	0	612	3	1 140
5.44740+	6 1.16550+	0 5.46400+	6 1.14640+	0 5.48050+	6 1.13530+	0	612	3	1 141
5.49710+	6 1.12810+	0 5.52500+	6 1.11349+	0 5.57500+	6 1.09744+	0	612	3	1 142
5.62500+	6 1.08348+	0 5.67500+	6 1.07560+	0 5.72500+	6 1.07231+	0	612	3	1 143
5.77500+	6 1.07579+	0 5.82500+	6 1.07645+	0 5.87500+	6 1.07694+	0	612	3	1 144
5.92500+	6 1.08520+	0 5.97500+	6 1.09225+	0 6.02500+	6 1.10069+	0	612	3	1 145
6.07500+	6 1.11349+	0 6.11110+	6 1.12120+	0 6.13120+	6 1.14670+	0	612	3	1 146
6.15130+	6 1.15940+	0 6.17140+	6 1.17810+	0 6.19150+	6 1.22170+	0	612	3	1 147
6.20070+	6 1.24470+	0 6.20990+	6 1.26560+	0 6.21900+	6 1.29740+	0	612	3	1 148
6.22820+	6 1.35300+	0 6.23620+	6 1.42360+	0 6.24410+	6 1.51350+	0	612	3	1 149
6.25210+	6 1.62750+	0 6.26010+	6 1.77060+	0 6.26870+	6 2.01080+	0	612	3	1 150
6.27730+	6 2.31310+	0 6.28580+	6 2.56320+	0 6.29010+	6 2.63290+	0	612	3	1 151
6.29440+	6 2.64680+	0 6.29940+	6 2.58750+	0 6.30440+	6 2.46710+	0	612	3	1 152
6.31450+	6 2.12290+	0 6.32450+	6 1.77470+	0 6.32960+	6 1.64900+	0	612	3	1 153
6.33460+	6 1.58250+	0 6.33840+	6 1.56050+	0 6.34230+	6 1.54470+	0	612	3	1 154
6.34610+	6 1.54100+	0 6.35000+	6 1.55530+	0 6.35510+	6 1.56620+	0	612	3	1 155
6.36030+	6 1.53830+	0 6.37070+	6 1.40990+	0 6.38100+	6 1.25790+	0	612	3	1 156
6.38620+	6 1.20050+	0 6.39130+	6 1.17000+	0 6.42330+	6 1.10320+	0	612	3	1 157
6.45520+	6 1.06270+	0 6.48710+	6 1.04140+	0 6.51900+	6 1.03220+	0	612	3	1 158
6.53500+	6 9.85970-	1 6.55100+	6 8.86900-	1 6.56690+	6 7.85810-	1	612	3	1 159

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
6.57490+	6 7.50390-	1 6.58290+	6 7.33540-	1 6.59680+	6 7.28500-	1	612	3	1 160
6.61070+	6 7.35500-	1 6.62460+	6 7.59260-	1 6.63840+	6 8.04480-	1	612	3	1 161
6.64850+	6 8.36000-	1 6.65850+	6 8.50250-	1 6.67860+	6 8.44410-	1	612	3	1 162
6.69870+	6 8.21890-	1 6.71880+	6 8.17640-	1 6.73780+	6 8.20980-	1	612	3	1 163
6.75670+	6 8.09170-	1 6.77560+	6 7.96170-	1 6.79450+	6 7.95930-	1	612	3	1 164
6.87500+	6 7.82897-	1 6.92500+	6 7.70109-	1 6.97500+	6 7.56564-	1	612	3	1 165
7.01840+	6 7.32580-	1 7.05290+	6 7.36620-	1 7.08730+	6 7.37950-	1	612	3	1 166
7.12180+	6 7.46060-	1 7.15630+	6 7.70440-	1 7.18930+	6 8.11130-	1	612	3	1 167
7.22230+	6 8.81590-	1 7.25530+	6 1.00700+	0 7.27180+	6 1.09820+	0	612	3	1 168
7.28830+	6 1.21250+	0 7.30840+	6 1.39310+	0 7.32850+	6 1.58870+	0	612	3	1 169
7.34860+	6 1.74410+	0 7.36870+	6 1.80410+	0 7.40100+	6 1.78880+	0	612	3	1 170
7.43330+	6 1.77000+	0 7.46560+	6 1.75810+	0 7.49790+	6 1.76350+	0	612	3	1 171
7.52810+	6 1.76150+	0 7.55820+	6 1.73700+	0 7.58840+	6 1.71160+	0	612	3	1 172
7.61850+	6 1.70720+	0 7.63650+	6 1.72280+	0 7.65440+	6 1.75750+	0	612	3	1 173
7.67240+	6 1.81640+	0 7.69030+	6 1.90480+	0 7.70250+	6 2.01980+	0	612	3	1 174
7.71470+	6 2.18040+	0 7.72690+	6 2.32370+	0 7.73910+	6 2.38690+	0	612	3	1 175
7.76140+	6 2.33500+	0 7.78360+	6 2.21600+	0 7.80590+	6 2.09610+	0	612	3	1 176
7.82810+	6 2.04180+	0 7.86260+	6 2.02140+	0 7.89710+	6 1.97270+	0	612	3	1 177
7.93150+	6 1.91660+	0 7.96600+	6 1.87380+	0 7.99470+	6 1.86490+	0	612	3	1 178
8.02340+	6 1.87830+	0 8.05210+	6 1.90190+	0 8.08080+	6 1.92330+	0	612	3	1 179
8.11670+	6 1.87540+	0 8.15260+	6 1.73330+	0 8.18850+	6 1.55980+	0	612	3	1 180
8.22440+	6 1.41770+	0 8.27820+	6 1.28610+	0 8.33210+	6 1.19930+	0	612	3	1 181
8.38590+	6 1.14530+	0 8.43970+	6 1.11190+	0 8.49860+	6 1.08720+	0	612	3	1 182
8.55750+	6 1.07090+	0 8.67500+	6 1.06314+	0 8.72500+	6 1.06173+	0	612	3	1 183
8.77500+	6 1.06350+	0 8.82500+	6 1.06909+	0 8.87500+	6 1.07683+	0	612	3	1 184
8.92500+	6 1.09149+	0 8.97500+	6 1.11581+	0 9.02500+	6 1.15132+	0	612	3	1 185
9.07500+	6 1.20471+	0 9.12500+	6 1.26211+	0 9.17500+	6 1.30114+	0	612	3	1 186
9.22500+	6 1.32239+	0 9.27500+	6 1.32528+	0 9.32500+	6 1.31075+	0	612	3	1 187
9.37500+	6 1.28656+	0 9.42500+	6 1.26056+	0 9.47500+	6 1.24418+	0	612	3	1 188
9.52500+	6 1.23584+	0 9.57500+	6 1.22737+	0 9.62500+	6 1.23101+	0	612	3	1 189
9.67500+	6 1.23994+	0 9.72500+	6 1.24034+	0 9.77500+	6 1.24017+	0	612	3	1 190
9.82500+	6 1.22945+	0 9.87500+	6 1.20610+	0 9.92500+	6 1.18381+	0	612	3	1 191
9.97500+	6 1.17215+	0 1.00250+	7 1.16338+	0 1.01250+	7 1.14280+	0	612	3	1 192
1.02250+	7 1.12827+	0 1.03250+	7 1.12654+	0 1.04250+	7 1.15320+	0	612	3	1 193
1.05250+	7 1.21342+	0 1.06250+	7 1.27667+	0 1.07250+	7 1.33328+	0	612	3	1 194
1.08250+	7 1.38655+	0 1.09250+	7 1.41772+	0 1.10250+	7 1.42380+	0	612	3	1 195
1.11250+	7 1.41908+	0 1.12250+	7 1.41075+	0 1.13250+	7 1.40366+	0	612	3	1 196
1.14250+	7 1.38910+	0 1.15250+	7 1.35763+	0 1.16250+	7 1.33973+	0	612	3	1 197
1.17250+	7 1.33816+	0 1.18250+	7 1.35959+	0 1.19250+	7 1.40895+	0	612	3	1 198
1.20250+	7 1.46733+	0 1.20750+	7 1.48810+	0 1.21250+	7 1.48332+	0	612	3	1 199
1.22250+	7 1.41480+	0 1.23250+	7 1.36230+	0 1.24250+	7 1.34322+	0	612	3	1 200
1.24750+	7 1.33921+	0 1.25250+	7 1.34335+	0 1.26250+	7 1.35354+	0	612	3	1 201
1.27250+	7 1.36185+	0 1.28250+	7 1.38268+	0 1.29250+	7 1.40073+	0	612	3	1 202
1.30250+	7 1.40791+	0 1.31250+	7 1.40350+	0 1.32250+	7 1.39481+	0	612	3	1 203
1.33250+	7 1.37645+	0 1.34250+	7 1.38159+	0 1.35250+	7 1.39481+	0	612	3	1 204
1.36250+	7 1.37932+	0 1.37250+	7 1.35004+	0 1.38250+	7 1.31061+	0	612	3	1 205
1.39250+	7 1.30055+	0 1.39750+	7 1.30156+	0 1.40250+	7 1.30490+	0	612	3	1 206
1.41250+	7 1.31194+	0 1.42250+	7 1.31272+	0 1.43250+	7 1.30303+	0	612	3	1 207
1.44250+	7 1.29940+	0 1.45250+	7 1.32766+	0 1.46250+	7 1.36316+	0	612	3	1 208
1.47250+	7 1.39050+	0 1.48250+	7 1.40450+	0 1.49250+	7 1.40187+	0	612	3	1 209
1.50250+	7 1.41632+	0 1.51250+	7 1.43058+	0 1.52250+	7 1.43931+	0	612	3	1 210
1.53250+	7 1.44593+	0 1.54250+	7 1.45441+	0 1.55250+	7 1.46347+	0	612	3	1 211
1.56250+	7 1.47410+	0 1.57250+	7 1.48950+	0 1.58250+	7 1.50078+	0	612	3	1 212
1.59250+	7 1.50659+	0 1.60250+	7 1.51219+	0 1.61250+	7 1.49685+	0	612	3	1 213
1.62250+	7 1.48013+	0 1.63250+	7 1.45887+	0 1.64250+	7 1.44897+	0	612	3	1 214

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
1.65250+	7	1.43289+	0	1.66250+	7	1.41673+	0	1.67250+	7	1.41041+	0	612	3	1	215
1.68250+	7	1.40273+	0	1.69250+	7	1.39451+	0	1.69750+	7	1.39422+	0	612	3	1	216
1.70250+	7	1.39509+	0	1.71250+	7	1.39487+	0	1.72250+	7	1.39470+	0	612	3	1	217
1.73250+	7	1.40569+	0	1.74250+	7	1.40164+	0	1.75250+	7	1.40340+	0	612	3	1	218
1.76250+	7	1.41226+	0	1.77250+	7	1.41815+	0	1.78750+	7	1.42662+	0	612	3	1	219
1.79250+	7	1.43129+	0	1.80250+	7	1.44550+	0	1.81250+	7	1.45361+	0	612	3	1	220
1.82250+	7	1.46525+	0	1.83250+	7	1.46659+	0	1.84250+	7	1.45669+	0	612	3	1	221
1.85250+	7	1.46394+	0	1.86250+	7	1.47907+	0	1.87250+	7	1.48558+	0	612	3	1	222
1.88250+	7	1.48387+	0	1.89240+	7	1.48064+	0	1.90240+	7	1.48996+	0	612	3	1	223
1.91240+	7	1.50449+	0	1.92240+	7	1.50853+	0	1.93240+	7	1.52399+	0	612	3	1	224
1.94240+	7	1.54152+	0	1.95239+	7	1.54701+	0	1.96239+	7	1.55744+	0	612	3	1	225
1.97240+	7	1.55143+	0	1.98240+	7	1.53906+	0	1.99240+	7	1.53247+	0	612	3	1	226
2.00000+	7	1.53055+	0									612	3	1	227
												612	3	0	228
6.01200+	3	1.18969+	1	0	0	0	0	0	0	0	612	3	2	229	
0.0	+ 0	0.0	+ 0	0	0	0	0	1	845	612	3	2	230		
	845		2	0	0	0	0	0	0	612	3	2	231		
1.00000-	5	4.74600+	0	1.00000-	4	4.74600+	0	1.00000-	3	4.74600+	0	612	3	2	232
1.00000-	2	4.74599+	0	2.53000-	2	4.74600+	0	1.00000-	1	4.74600+	0	612	3	2	233
1.00000+	0	4.74600+	0	5.00000+	0	4.74600+	0	1.00000+	1	4.74590+	0	612	3	2	234
1.00000+	2	4.74568+	0	1.00000+	3	4.74231+	0	5.00000+	3	4.72723+	0	612	3	2	235
1.00000+	4	4.70849+	0	1.50000+	4	4.68990+	0	2.00000+	4	4.67144+	0	612	3	2	236
2.50000+	4	4.65313+	0	2.80289+	4	4.64211+	0	3.00000+	4	4.63495+	0	612	3	2	237
3.40386+	4	4.62037+	0	3.50000+	4	4.61691+	0	4.00000+	4	4.59900+	0	612	3	2	238
5.00000+	4	4.56359+	0	6.00000+	4	4.52869+	0	7.00000+	4	4.49431+	0	612	3	2	239
8.00000+	4	4.46043+	0	9.00000+	4	4.42703+	0	1.00000+	5	4.39410+	0	612	3	2	240
1.33352+	5	4.28881+	0	1.50000+	5	4.23626+	0	1.77828+	5	4.15421+	0	612	3	2	241
2.00000+	5	4.08885+	0	2.37137+	5	3.98633+	0	2.50000+	5	3.95082+	0	612	3	2	242
3.00000+	5	3.82125+	0	3.16228+	5	3.78169+	0	3.50000+	5	3.69936+	0	612	3	2	243
4.00000+	5	3.58441+	0	4.21696+	5	3.53854+	0	5.00000+	5	3.37302+	0	612	3	2	244
5.62341+	5	3.25452+	0	6.00000+	5	3.18294+	0	7.00000+	5	3.01089+	0	612	3	2	245
8.00000+	5	2.85427+	0	9.00000+	5	2.71094+	0	1.00000+	6	2.57927+	0	612	3	2	246
1.10000+	6	2.45779+	0	1.14141+	6	2.41038+	0	1.15000+	6	2.40054+	0	612	3	2	247
1.20000+	6	2.34544+	0	1.25000+	6	2.29238+	0	1.30000+	6	2.24127+	0	612	3	2	248
1.35000+	6	2.19202+	0	1.40000+	6	2.14457+	0	1.45000+	6	2.09883+	0	612	3	2	249
1.50000+	6	2.05476+	0	1.55000+	6	2.01231+	0	1.60000+	6	1.97143+	0	612	3	2	250
1.65000+	6	1.93210+	0	1.70000+	6	1.89429+	0	1.75000+	6	1.85797+	0	612	3	2	251
1.80000+	6	1.82312+	0	1.85000+	6	1.78971+	0	1.90000+	6	1.75769+	0	612	3	2	252
1.95000+	6	1.72711+	0	2.00000+	6	1.69945+	0	2.01000+	6	1.69518+	0	612	3	2	253
2.02000+	6	1.69230+	0	2.03000+	6	1.69237+	0	2.04000+	6	1.69964+	0	612	3	2	254
2.05000+	6	1.72821+	0	2.06000+	6	1.84468+	0	2.06100+	6	1.87046+	0	612	3	2	255
2.06200+	6	1.90152+	0	2.06300+	6	1.93925+	0	2.06400+	6	1.98552+	0	612	3	2	256
2.06500+	6	2.04284+	0	2.06600+	6	2.11462+	0	2.06700+	6	2.20562+	0	612	3	2	257
2.06800+	6	2.32241+	0	2.06900+	6	2.47425+	0	2.07000+	6	2.67404+	0	612	3	2	258
2.07100+	6	2.93938+	0	2.07200+	6	3.29273+	0	2.07300+	6	3.75802+	0	612	3	2	259
2.07400+	6	4.34708+	0	2.07500+	6	5.02594+	0	2.07600+	6	5.66575+	0	612	3	2	260
2.07700+	6	6.04488+	0	2.07800+	6	5.99466+	0	2.07900+	6	5.56589+	0	612	3	2	261
2.08000+	6	4.96483+	0	2.08100+	6	4.36971+	0	2.08200+	6	3.86195+	0	612	3	2	262
2.08300+	6	3.45621+	0	2.08400+	6	3.13987+	0	2.08500+	6	2.89429+	0	612	3	2	263
2.08600+	6	2.70255+	0	2.08700+	6	2.55132+	0	2.08800+	6	2.43060+	0	612	3	2	264
2.08900+	6	2.33305+	0	2.09000+	6	2.25326+	0	2.09100+	6	2.18724+	0	612	3	2	265
2.09200+	6	2.13204+	0	2.09300+	6	2.08543+	0	2.09400+	6	2.04570+	0	612	3	2	266
2.09500+	6	2.01156+	0	2.09600+	6	1.98199+	0	2.09700+	6	1.95620+	0	612	3	2	267
2.09800+	6	1.93355+	0	2.09900+	6	1.91355+	0	2.10000+	6	1.89577+	0	612	3	2	268
2.11000+	6	1.78966+	0	2.12000+	6	1.74150+	0	2.13000+	6	1.71395+	0	612	3	2	269

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
2.14000+	6	1.69571+	0	2.15000+	6	1.68240+	0	2.16000+	6	1.67197+	0	612	3	2	270
2.17000+	6	1.66340+	0	2.18000+	6	1.65608+	0	2.19000+	6	1.64968+	0	612	3	2	271
2.20000+	6	1.64397+	0	2.22474+	6	1.63306+	0	2.25000+	6	1.62192+	0	612	3	2	272
2.30000+	6	1.60683+	0	2.35000+	6	1.59704+	0	2.40000+	6	1.59247+	0	612	3	2	273
2.45000+	6	1.59365+	0	2.50000+	6	1.60156+	0	2.55000+	6	1.61764+	0	612	3	2	274
2.60000+	6	1.64400+	0	2.65000+	6	1.68377+	0	2.70000+	6	1.74201+	0	612	3	2	275
2.72000+	6	1.77227+	0	2.74000+	6	1.80769+	0	2.76000+	6	1.84943+	0	612	3	2	276
2.78000+	6	1.89912+	0	2.80000+	6	1.95985+	0	2.80100+	6	1.96337+	0	612	3	2	277
2.80200+	6	1.96698+	0	2.80300+	6	1.97070+	0	2.80400+	6	1.97457+	0	612	3	2	278
2.80500+	6	1.97863+	0	2.80600+	6	1.98298+	0	2.80700+	6	1.98773+	0	612	3	2	279
2.80800+	6	1.99314+	0	2.80900+	6	1.99967+	0	2.81000+	6	2.00829+	0	612	3	2	280
2.81100+	6	2.02135+	0	2.81200+	6	2.04568+	0	2.81300+	6	2.10818+	0	612	3	2	281
2.81400+	6	2.39818+	0	2.81500+	6	5.26694+	0	2.81600+	6	2.47051+	0	612	3	2	282
2.81700+	6	2.15129+	0	2.81800+	6	2.08655+	0	2.81900+	6	2.06535+	0	612	3	2	283
2.82000+	6	2.05736+	0	2.82100+	6	2.05475+	0	2.82200+	6	2.05476+	0	612	3	2	284
2.82300+	6	2.05621+	0	2.82400+	6	2.05854+	0	2.82500+	6	2.06143+	0	612	3	2	285
2.82600+	6	2.06473+	0	2.82700+	6	2.06831+	0	2.82800+	6	2.07212+	0	612	3	2	286
2.82900+	6	2.07611+	0	2.83000+	6	2.08024+	0	2.83200+	6	2.08888+	0	612	3	2	287
2.83400+	6	2.09794+	0	2.83600+	6	2.10736+	0	2.83800+	6	2.11710+	0	612	3	2	288
2.84000+	6	2.12716+	0	2.84500+	6	2.15367+	0	2.85000+	6	2.18216+	0	612	3	2	289
2.86000+	6	2.24565+	0	2.87000+	6	2.31928+	0	2.88000+	6	2.40532+	0	612	3	2	290
2.89000+	6	2.50662+	0	2.90000+	6	2.62637+	0	2.91000+	6	2.76718+	0	612	3	2	291
2.92000+	6	2.92791+	0	2.93000+	6	3.09462+	0	2.93500+	6	3.16730+	0	612	3	2	292
2.94000+	6	3.21853+	0	2.94500+	6	3.23100+	0	2.95000+	6	3.18302+	0	612	3	2	293
2.95500+	6	3.05402+	0	2.96000+	6	2.83543+	0	2.96500+	6	2.54210+	0	612	3	2	294
2.97000+	6	2.21306+	0	2.97500+	6	1.89637+	0	2.98000+	6	1.62875+	0	612	3	2	295
2.98500+	6	1.42591+	0	2.99000+	6	1.28599+	0	2.99500+	6	1.19820+	0	612	3	2	296
2.99800+	6	1.16517+	0	3.00000+	6	1.14971+	0	3.01000+	6	1.12770+	0	612	3	2	297
3.02000+	6	1.15835+	0	3.03000+	6	1.21056+	0	3.04000+	6	1.27004+	0	612	3	2	298
3.05000+	6	1.33054+	0	3.06000+	6	1.38946+	0	3.07000+	6	1.44587+	0	612	3	2	299
3.08000+	6	1.49957+	0	3.09000+	6	1.55069+	0	3.10000+	6	1.59946+	0	612	3	2	300
3.15000+	6	1.81696+	0	3.20000+	6	2.00595+	0	3.25000+	6	2.17525+	0	612	3	2	301
3.30000+	6	2.32453+	0	3.30808+	6	2.34470+	0	3.35000+	6	2.44939+	0	612	3	2	302
3.40000+	6	2.54462+	0	3.45000+	6	2.60654+	0	3.50000+	6	2.63404+	0	612	3	2	303
3.55000+	6	2.62912+	0	3.60000+	6	2.59614+	0	3.65000+	6	2.54084+	0	612	3	2	304
3.70000+	6	2.46926+	0	3.75000+	6	2.38689+	0	3.80000+	6	2.29825+	0	612	3	2	305
3.85000+	6	2.20682+	0	3.90000+	6	2.11510+	0	3.95000+	6	2.02493+	0	612	3	2	306
4.00000+	6	1.93819+	0	4.05000+	6	1.85856+	0	4.10000+	6	1.79787+	0	612	3	2	307
4.15000+	6	1.80070+	0	4.20000+	6	2.00159+	0	4.21350+	6	2.07588+	0	612	3	2	308
4.22640+	6	2.12678+	0	4.23930+	6	2.17328+	0	4.25340+	6	2.21018+	0	612	3	2	309
4.26740+	6	2.22418+	0	4.28150+	6	2.21538+	0	4.29550+	6	2.18418+	0	612	3	2	310
4.32370+	6	2.09798+	0	4.35180+	6	2.01048+	0	4.37990+	6	1.92478+	0	612	3	2	311
4.39141+	6	1.89168+	0	4.40800+	6	1.84398+	0	4.44870+	6	1.74508+	0	612	3	2	312
4.48940+	6	1.66678+	0	4.53000+	6	1.60178+	0	4.57070+	6	1.54278+	0	612	3	2	313
4.60340+	6	1.49978+	0	4.63600+	6	1.46308+	0	4.66870+	6	1.43058+	0	612	3	2	314
4.70140+	6	1.39978+	0	4.74440+	6	1.35578+	0	4.78730+	6	1.31168+	0	612	3	2	315
4.81200+	6	1.29302+	0	4.83020+	6	1.27244+	0	4.83549+	6	1.26792+	0	612	3	2	316
4.86336+	6	1.25031+	0	4.89122+	6	1.19742+	0	4.89882+	6	1.19266+	0	612	3	2	317
4.90643+	6	1.21053+	0	4.92140+	6	1.21768+	0	4.92470+	6	1.22034+	0	612	3	2	318
4.92800+	6	1.23850+	0	4.93130+	6	1.28996+	0	4.93260+	6	1.30918+	0	612	3	2	319
4.93390+	6	1.36469+	0	4.93460+	6	1.43242+	0	4.93520+	6	1.54120+	0	612	3	2	320
4.93590+	6	1.70124+	0	4.93660+	6	1.92367+	0	4.93700+	6	2.02952+	0	612	3	2	321
4.93740+	6	2.01977+	0	4.93790+	6	1.92538+	0	4.93830+	6	1.77683+	0	612	3	2	322
4.93920+	6	1.44220+	0	4.93970+	6	1.31761+	0	4.94010+	6	1.26266+	0	612	3	2	323
4.94280+	6	1.21494+	0	4.94550+	6	1.18763+	0	4.94820+	6	1.17712+	0	612	3	2	324

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
4.95090+	6	1.17980+	0	4.95510+	6	1.17942+	0	4.95940+	6	1.16401+	0	612	3	2	325
4.96360+	6	1.14993+	0	4.96456+	6	1.15073+	0	4.96780+	6	1.15464+	0	612	3	2	326
4.97530+	6	1.16386+	0	4.98280+	6	1.14408+	0	5.00000+	6	1.13490+	0	612	3	2	327
5.00583+	6	1.13179+	0	5.02500+	6	1.12064+	0	5.04711+	6	1.11157+	0	612	3	2	328
5.07500+	6	1.09894+	0	5.08838+	6	1.09167+	0	5.12500+	6	1.07044+	0	612	3	2	329
5.12966+	6	1.06774+	0	5.17500+	6	1.03948+	0	5.20270+	6	1.02834+	0	612	3	2	330
5.21221+	6	1.01894+	0	5.21710+	6	1.01391+	0	5.23140+	6	1.00011+	0	612	3	2	331
5.24570+	6	9.88004-	1	5.26000+	6	9.78504-	1	5.27690+	6	9.67021-	1	612	3	2	332
5.29370+	6	9.53961-	1	5.29476+	6	9.53212-	1	5.31050+	6	9.41810-	1	612	3	2	333
5.32740+	6	9.33915-	1	5.33310+	6	9.51035-	1	5.33880+	6	1.00325+	0	612	3	2	334
5.34450+	6	1.08757+	0	5.35020+	6	1.20119+	0	5.35480+	6	1.36608+	0	612	3	2	335
5.35930+	6	1.58819+	0	5.36390+	6	1.76367+	0	5.36620+	6	1.80161+	0	612	3	2	336
5.36840+	6	1.78898+	0	5.37350+	6	1.68085+	0	5.37860+	6	1.55741+	0	612	3	2	337
5.38360+	6	1.43800+	0	5.38870+	6	1.34196+	0	5.39920+	6	1.21212+	0	612	3	2	338
5.40970+	6	1.13387+	0	5.42020+	6	1.08913+	0	5.43080+	6	1.06026+	0	612	3	2	339
5.44740+	6	1.02494+	0	5.45986+	6	1.00758+	0	5.46400+	6	1.00192+	0	612	3	2	340
5.47474+	6	9.92363-	1	5.48050+	6	9.87237-	1	5.49710+	6	9.76431-	1	612	3	2	341
5.52500+	6	9.55759-	1	5.54241+	6	9.46387-	1	5.57500+	6	9.30336-	1	612	3	2	342
5.62496+	6	9.07817-	1	5.62500+	6	9.07799-	1	5.67500+	6	8.91245-	1	612	3	2	343
5.72187+	6	8.80029-	1	5.72500+	6	8.79141-	1	5.77500+	6	8.71712-	1	612	3	2	344
5.81878+	6	8.62738-	1	5.82500+	6	8.61411-	1	5.87500+	6	8.50566-	1	612	3	2	345
5.92500+	6	8.47493-	1	5.97500+	6	8.40329-	1	6.00000+	6	8.41762-	1	612	3	2	346
6.01259+	6	8.41033-	1	6.02500+	6	8.40936-	1	6.07500+	6	8.44901-	1	612	3	2	347
6.10950+	6	8.46172-	1	6.11110+	6	8.46348-	1	6.13120+	6	8.69750-	1	612	3	2	348
6.15130+	6	8.80353-	1	6.17140+	6	8.96955-	1	6.18075+	6	9.16260-	1	612	3	2	349
6.19150+	6	9.38450-	1	6.20070+	6	9.60485-	1	6.20641+	6	9.72856-	1	612	3	2	350
6.20990+	6	9.80772-	1	6.21900+	6	1.01254+	0	6.22820+	6	1.06811+	0	612	3	2	351
6.23620+	6	1.13868+	0	6.24410+	6	1.22855+	0	6.25210+	6	1.34252+	0	612	3	2	352
6.26010+	6	1.48560+	0	6.26870+	6	1.72577+	0	6.27730+	6	2.02804+	0	612	3	2	353
6.28580+	6	2.27811+	0	6.29010+	6	2.34779+	0	6.29440+	6	2.36168+	0	612	3	2	354
6.29940+	6	2.30236+	0	6.30331+	6	2.20819+	0	6.30440+	6	2.18209+	0	612	3	2	355
6.31450+	6	1.83917+	0	6.32450+	6	1.49224+	0	6.32960+	6	1.36719+	0	612	3	2	356
6.33460+	6	1.30133+	0	6.33840+	6	1.27981+	0	6.34230+	6	1.26451+	0	612	3	2	357
6.34610+	6	1.26130+	0	6.35000+	6	1.27609+	0	6.35510+	6	1.28764+	0	612	3	2	358
6.36030+	6	1.26040+	0	6.37070+	6	1.13333+	0	6.38100+	6	9.82640-	1	612	3	2	359
6.38620+	6	9.25901-	1	6.39130+	6	8.96051-	1	6.40022+	6	8.78567-	1	612	3	2	360
6.42330+	6	8.36779-	1	6.45520+	6	8.05115-	1	6.48710+	6	7.92650-	1	612	3	2	361
6.51507+	6	7.92330-	1	6.51900+	6	7.92583-	1	6.53500+	6	7.51996-	1	612	3	2	362
6.55100+	6	6.58569-	1	6.55808+	6	6.16052-	1	6.56690+	6	5.63086-	1	612	3	2	363
6.57490+	6	5.30488-	1	6.58290+	6	5.16459-	1	6.59680+	6	5.16322-	1	612	3	2	364
6.61070+	6	5.28224-	1	6.62460+	6	5.56886-	1	6.62993+	6	5.76231-	1	612	3	2	365
6.63840+	6	6.06686-	1	6.64850+	6	6.41425-	1	6.65850+	6	6.58862-	1	612	3	2	366
6.67860+	6	6.59429-	1	6.69870+	6	6.43315-	1	6.71880+	6	6.45472-	1	612	3	2	367
6.73780+	6	6.54868-	1	6.74478+	6	6.52731-	1	6.75670+	6	6.47960-	1	612	3	2	368
6.77560+	6	6.39206-	1	6.79450+	6	6.43212-	1	6.80221+	6	6.43696-	1	612	3	2	369
6.85963+	6	6.41601-	1	6.87500+	6	6.39449-	1	6.89911+	6	6.33811-	1	612	3	2	370
6.92500+	6	6.25590-	1	6.93859+	6	6.21068-	1	6.97500+	6	6.05001-	1	612	3	2	371
7.00000+	6	5.86925-	1	7.01756+	6	5.74229-	1	7.01840+	6	5.73524-	1	612	3	2	372
7.05290+	6	5.67660-	1	7.08730+	6	5.59115-	1	7.09652+	6	5.58636-	1	612	3	2	373
7.12180+	6	5.55228-	1	7.15630+	6	5.66849-	1	7.17548+	6	5.83404-	1	612	3	2	374
7.18930+	6	5.94553-	1	7.22230+	6	6.50945-	1	7.25530+	6	7.62286-	1	612	3	2	375
7.26547+	6	8.14162-	1	7.27180+	6	8.45539-	1	7.28830+	6	9.50427-	1	612	3	2	376
7.30840+	6	1.11956+	0	7.32850+	6	1.30370+	0	7.33340+	6	1.33878+	0	612	3	2	377
7.34860+	6	1.44820+	0	7.36870+	6	1.49749+	0	7.40100+	6	1.46498+	0	612	3	2	378
7.43330+	6	1.42897+	0	7.44282+	6	1.42039+	0	7.46560+	6	1.40001+	0	612	3	2	379

10	20	30	40	50	60	MAT	MF	MT	SEQ						
7.49132+	6	1.39078+	0	7.49790+	6	1.38979+	0	7.52722+	6	1.37852+	0	612	3	2	380
7.52810+	6	1.37840+	0	7.55820+	6	1.35164+	0	7.56311+	6	1.34714+	0	612	3	2	381
7.58840+	6	1.32979+	0	7.60671+	6	1.32995+	0	7.61850+	6	1.33092+	0	612	3	2	382
7.61858+	6	1.33101+	0	7.63489+	6	1.34696+	0	7.63650+	6	1.34867+	0	612	3	2	383
7.64141+	6	1.35913+	0	7.64234+	6	1.36112+	0	7.65440+	6	1.38519+	0	612	3	2	384
7.66609+	6	1.42411+	0	7.67240+	6	1.44441+	0	7.68984+	6	1.52959+	0	612	3	2	385
7.69030+	6	1.53179+	0	7.70250+	6	1.64468+	0	7.70667+	6	1.69885+	0	612	3	2	386
7.71470+	6	1.80231+	0	7.72690+	6	1.94219+	0	7.73734+	6	1.99334+	0	612	3	2	387
7.73910+	6	2.00183+	0	7.74257+	6	1.99252+	0	7.76140+	6	1.93892+	0	612	3	2	388
7.77846+	6	1.83862+	0	7.78360+	6	1.80709+	0	7.78485+	6	1.79940+	0	612	3	2	389
7.80590+	6	1.67031+	0	7.82810+	6	1.59924+	0	7.83235+	6	1.59351+	0	612	3	2	390
7.83588+	6	1.58917+	0	7.86260+	6	1.55003+	0	7.87985+	6	1.51061+	0	612	3	2	391
7.88700+	6	1.49581+	0	7.89331+	6	1.48273+	0	7.89710+	6	1.47435+	0	612	3	2	392
7.92736+	6	1.40085+	0	7.93150+	6	1.39171+	0	7.95111+	6	1.35607+	0	612	3	2	393
7.96600+	6	1.33168+	0	7.97486+	6	1.32542+	0	7.99470+	6	1.31403+	0	612	3	2	394
8.00000+	6	1.31511+	0	8.00816+	6	1.31677+	0	8.02340+	6	1.32106+	0	612	3	2	395
8.05210+	6	1.33934+	0	8.06559+	6	1.34690+	0	8.08080+	6	1.35841+	0	612	3	2	396
8.11420+	6	1.31419+	0	8.11670+	6	1.31091+	0	8.12302+	6	1.28604+	0	612	3	2	397
8.15260+	6	1.17858+	0	8.18044+	6	1.05309+	0	8.18850+	6	1.02008+	0	612	3	2	398
8.22440+	6	9.04417-	1	8.23787+	6	8.81389-	1	8.25355+	6	8.56613-	1	612	3	2	399
8.27820+	6	8.16499-	1	8.29700+	6	8.01615-	1	8.32322+	6	7.80508-	1	612	3	2	400
8.33210+	6	7.72817-	1	8.33478+	6	7.72121-	1	8.38590+	6	7.48657-	1	612	3	2	401
8.39289+	6	7.48125-	1	8.43168+	6	7.41930-	1	8.43970+	6	7.39346-	1	612	3	2	402
8.46256+	6	7.36582-	1	8.49739+	6	7.29703-	1	8.49860+	6	7.29393-	1	612	3	2	403
8.52858+	6	7.25992-	1	8.53224+	6	7.25117-	1	8.55750+	6	7.18497-	1	612	3	2	404
8.62550+	6	7.15002-	1	8.65258+	6	7.11203-	1	8.67500+	6	7.07643-	1	612	3	2	405
8.72240+	6	7.01909-	1	8.72474+	6	7.01505-	1	8.72500+	6	7.01460-	1	612	3	2	406
8.77292+	6	6.96216-	1	8.77500+	6	6.95892-	1	8.81931+	6	6.92359-	1	612	3	2	407
8.82500+	6	6.91880-	1	8.83309+	6	6.91547-	1	8.87500+	6	6.87783-	1	612	3	2	408
8.89326+	6	6.88670-	1	8.92500+	6	6.88253-	1	8.95343+	6	6.93371-	1	612	3	2	409
8.97500+	6	6.95640-	1	9.00000+	6	7.03862-	1	9.01313+	6	7.08181-	1	612	3	2	410
9.01360+	6	7.08359-	1	9.02500+	6	7.11364-	1	9.05794+	6	7.31824-	1	612	3	2	411
9.07500+	6	7.40589-	1	9.10228+	6	7.56792-	1	9.12500+	6	7.69309-	1	612	3	2	412
9.17105+	6	7.77758-	1	9.17500+	6	7.78418-	1	9.19095+	6	7.75407-	1	612	3	2	413
9.22500+	6	7.71534-	1	9.23528+	6	7.66590-	1	9.27500+	6	7.52594-	1	612	3	2	414
9.27962+	6	7.49356-	1	9.32396+	6	7.26601-	1	9.32500+	6	7.26324-	1	612	3	2	415
9.32897+	6	7.24499-	1	9.36830+	6	7.02918-	1	9.37500+	6	7.00596-	1	612	3	2	416
9.42500+	6	6.81455-	1	9.44430+	6	6.77779-	1	9.47500+	6	6.74701-	1	612	3	2	417
9.48689+	6	6.75420-	1	9.50000+	6	6.74748-	1	9.52031+	6	6.73612-	1	612	3	2	418
9.52500+	6	6.73575-	1	9.56586+	6	6.73151-	1	9.57500+	6	6.72155-	1	612	3	2	419
9.59631+	6	6.74993-	1	9.62500+	6	6.78987-	1	9.64482+	6	6.83842-	1	612	3	2	420
9.67232+	6	6.91273-	1	9.67500+	6	6.91757-	1	9.70224+	6	6.92021-	1	612	3	2	421
9.70398+	6	6.92288-	1	9.72500+	6	6.92658-	1	9.73566+	6	6.92722-	1	612	3	2	422
9.75967+	6	6.89524-	1	9.77500+	6	6.90007-	1	9.79899+	6	6.85700-	1	612	3	2	423
9.80808+	6	6.83366-	1	9.82500+	6	6.79024-	1	9.86233+	6	6.60012-	1	612	3	2	424
9.87452+	6	6.54452-	1	9.87500+	6	6.54297-	1	9.92500+	6	6.39232-	1	612	3	2	425
9.92567+	6	6.39173-	1	9.97500+	6	6.40216-	1	9.98938+	6	6.41351-	1	612	3	2	426
1.00000+	7	6.42516-	1	1.00250+	7	6.39711-	1	1.00333+	7	6.38527-	1	612	3	2	427
1.01042+	7	6.31882-	1	1.01250+	7	6.28390-	1	1.01410+	7	6.26671-	1	612	3	2	428
1.02000+	7	6.20507-	1	1.02250+	7	6.23803-	1	1.02478+	7	6.29726-	1	612	3	2	429
1.02487+	7	6.29877-	1	1.03250+	7	6.39410-	1	1.03564+	7	6.52246-	1	612	3	2	430
1.03914+	7	6.65386-	1	1.04250+	7	6.75237-	1	1.04520+	7	6.92213-	1	612	3	2	431
1.05250+	7	7.34569-	1	1.05654+	7	7.59233-	1	1.06250+	7	7.95327-	1	612	3	2	432
1.06785+	7	8.24172-	1	1.07250+	7	8.48440-	1	1.07744+	7	8.72570-	1	612	3	2	433
1.08250+	7	8.96140-	1	1.08914+	7	9.12394-	1	1.09250+	7	9.20619-	1	612	3	2	434

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
1.09408+	7	9.20522-	1	1.09656+	7	9.21093-	1	1.09834+	7	9.22505-	1	612	3	2	435
1.10000+	7	9.23356-	1	1.10250+	7	9.24800-	1	1.10879+	7	9.21637-	1	612	3	2	436
1.11092+	7	9.20041-	1	1.11250+	7	9.20035-	1	1.11382+	7	9.19552-	1	612	3	2	437
1.11924+	7	9.17402-	1	1.12250+	7	9.15363-	1	1.12528+	7	9.13969-	1	612	3	2	438
1.13250+	7	9.12550-	1	1.13356+	7	9.11550-	1	1.14146+	7	9.03776-	1	612	3	2	439
1.14250+	7	9.02666-	1	1.15250+	7	8.75065-	1	1.16168+	7	8.62186-	1	612	3	2	440
1.16227+	7	8.61329-	1	1.16250+	7	8.60970-	1	1.16835+	7	8.61368-	1	612	3	2	441
1.17250+	7	8.60500-	1	1.17300+	7	8.61545-	1	1.17304+	7	8.61631-	1	612	3	2	442
1.18250+	7	8.82258-	1	1.18309+	7	8.85192-	1	1.19250+	7	9.31020-	1	612	3	2	443
1.19747+	7	9.59707-	1	1.20000+	7	9.74310-	1	1.20250+	7	9.88741-	1	612	3	2	444
1.20391+	7	9.94505-	1	1.20412+	7	9.95343-	1	1.20750+	7	1.00915+	0	612	3	2	445
1.21142+	7	1.00512+	0	1.21250+	7	1.00378+	0	1.22250+	7	9.32429-	1	612	3	2	446
1.22472+	7	9.20145-	1	1.22533+	7	9.16698-	1	1.23250+	7	8.77080-	1	612	3	2	447
1.24250+	7	8.55244-	1	1.24655+	7	8.50879-	1	1.24750+	7	8.50022-	1	612	3	2	448
1.25000+	7	8.51840-	1	1.25200+	7	8.54661-	1	1.25250+	7	8.55367-	1	612	3	2	449
1.25448+	7	8.58537-	1	1.26250+	7	8.70194-	1	1.26636+	7	8.75078-	1	612	3	2	450
1.26777+	7	8.76689-	1	1.27250+	7	8.83160-	1	1.28250+	7	9.09359-	1	612	3	2	451
1.28899+	7	9.24557-	1	1.29250+	7	9.32890-	1	1.29755+	7	9.39389-	1	612	3	2	452
1.30000+	7	9.42314-	1	1.30250+	7	9.43426-	1	1.30581+	7	9.41060-	1	612	3	2	453
1.30799+	7	9.39501-	1	1.31250+	7	9.35919-	1	1.31274+	7	9.35625-	1	612	3	2	454
1.32250+	7	9.22044-	1	1.33097+	7	9.02066-	1	1.33250+	7	8.98458-	1	612	3	2	455
1.33649+	7	8.98423-	1	1.34250+	7	8.97579-	1	1.34963+	7	9.02337-	1	612	3	2	456
1.35208+	7	9.03886-	1	1.35250+	7	9.04152-	1	1.36024+	7	8.86825-	1	612	3	2	457
1.36250+	7	8.81552-	1	1.36450+	7	8.74127-	1	1.37045+	7	8.52011-	1	612	3	2	458
1.37250+	7	8.44391-	1	1.38250+	7	7.97070-	1	1.38369+	7	7.94874-	1	612	3	2	459
1.38400+	7	7.94313-	1	1.39250+	7	7.78370-	1	1.39750+	7	7.75781-	1	612	3	2	460
1.40000+	7	7.75402-	1	1.40250+	7	7.75022-	1	1.40993+	7	7.74161-	1	612	3	2	461
1.41250+	7	7.73864-	1	1.41414+	7	7.72647-	1	1.42250+	7	7.66444-	1	612	3	2	462
1.42676+	7	7.58823-	1	1.43150+	7	7.50869-	1	1.43250+	7	7.49224-	1	612	3	2	463
1.43290+	7	7.48808-	1	1.44250+	7	7.40722-	1	1.45250+	7	7.64187-	1	612	3	2	464
1.45479+	7	7.71218-	1	1.45644+	7	7.76284-	1	1.46250+	7	7.94893-	1	612	3	2	465
1.46983+	7	8.11419-	1	1.47250+	7	8.17563-	1	1.47900+	7	8.23846-	1	612	3	2	466
1.48250+	7	8.27630-	1	1.48866+	7	8.24044-	1	1.49248+	7	8.21820-	1	612	3	2	467
1.49250+	7	8.21815-	1	1.49965+	7	8.32130-	1	1.50000+	7	8.32634-	1	612	3	2	468
1.50250+	7	8.36069-	1	1.50473+	7	8.39090-	1	1.50721+	7	8.42391-	1	612	3	2	469
1.50969+	7	8.45670-	1	1.51217+	7	8.48931-	1	1.51250+	7	8.49362-	1	612	3	2	470
1.51465+	7	8.50983-	1	1.51962+	7	8.54677-	1	1.52152+	7	8.56066-	1	612	3	2	471
1.52247+	7	8.56701-	1	1.52250+	7	8.56722-	1	1.52458+	7	8.57673-	1	612	3	2	472
1.53250+	7	8.61183-	1	1.53450+	7	8.62441-	1	1.54250+	7	8.67368-	1	612	3	2	473
1.54329+	7	8.67900-	1	1.54442+	7	8.68740-	1	1.55000+	7	8.72867-	1	612	3	2	474
1.55206+	7	8.74216-	1	1.55250+	7	8.74620-	1	1.56250+	7	8.85349-	1	612	3	2	475
1.56427+	7	8.88092-	1	1.57250+	7	9.00937-	1	1.57320+	7	9.01740-	1	612	3	2	476
1.57419+	7	9.02814-	1	1.58250+	7	9.11979-	1	1.58412+	7	9.12878-	1	612	3	2	477
1.58500+	7	9.13380-	1	1.58938+	7	9.15744-	1	1.59250+	7	9.17430-	1	612	3	2	478
1.60000+	7	9.21322-	1	1.60250+	7	9.22596-	1	1.60269+	7	9.22295-	1	612	3	2	479
1.60758+	7	9.14572-	1	1.61164+	7	9.08282-	1	1.61250+	7	9.07126-	1	612	3	2	480
1.62127+	7	8.94126-	1	1.62250+	7	8.92308-	1	1.62489+	7	8.87689-	1	612	3	2	481
1.63081+	7	8.75865-	1	1.63250+	7	8.72491-	1	1.63985+	7	8.66163-	1	612	3	2	482
1.64250+	7	8.63887-	1	1.65000+	7	8.52810-	1	1.65250+	7	8.49260-	1	612	3	2	483
1.65843+	7	8.40791-	1	1.66250+	7	8.35081-	1	1.67122+	7	8.31425-	1	612	3	2	484
1.67250+	7	8.31139-	1	1.67448+	7	8.30427-	1	1.67657+	7	8.29722-	1	612	3	2	485
1.68250+	7	8.27333-	1	1.69052+	7	8.23668-	1	1.69250+	7	8.22728-	1	612	3	2	486
1.69750+	7	8.24175-	1	1.70000+	7	8.25477-	1	1.70250+	7	8.26713-	1	612	3	2	487
1.70657+	7	8.27924-	1	1.71250+	7	8.29464-	1	1.71459+	7	8.30017-	1	612	3	2	488
1.72250+	7	8.31805-	1	1.72261+	7	8.31951-	1	1.72700+	7	8.37820-	1	612	3	2	489

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
1.72825+	7 8.39503-	1 1.73250+	7 8.44943-	1 1.73615+	7 8.44123-	1	612	3	2 490
1.73781+	7 8.43700-	1 1.73914+	7 8.43403-	1 1.74250+	7 8.42657-	1	612	3	2 491
1.75000+	7 8.45346-	1 1.75250+	7 8.46267-	1 1.75301+	7 8.46815-	1	612	3	2 492
1.76250+	7 8.57400-	1 1.76830+	7 8.62146-	1 1.76884+	7 8.62571-	1	612	3	2 493
1.77250+	7 8.65454-	1 1.77994+	7 8.71132-	1 1.78342+	7 8.73813-	1	612	3	2 494
1.78750+	7 8.77089-	1 1.79038+	7 8.80464-	1 1.79250+	7 8.83107-	1	612	3	2 495
1.80000+	7 8.96107-	1 1.80044+	7 8.96879-	1 1.80250+	7 9.00414-	1	612	3	2 496
1.81250+	7 9.11460-	1 1.81371+	7 9.13223-	1 1.81382+	7 9.13383-	1	612	3	2 497
1.82250+	7 9.26131-	1 1.82500+	7 9.27227-	1 1.83162+	7 9.30133-	1	612	3	2 498
1.83250+	7 9.30494-	1 1.83259+	7 9.30430-	1 1.84250+	7 9.22990-	1	612	3	2 499
1.84422+	7 9.24648-	1 1.84747+	7 9.27806-	1 1.84866+	7 9.28964-	1	612	3	2 500
1.85000+	7 9.30229-	1 1.85250+	7 9.32629-	1 1.85857+	7 9.43233-	1	612	3	2 501
1.86250+	7 9.50103-	1 1.86473+	7 9.52076-	1 1.86871+	7 9.55484-	1	612	3	2 502
1.87250+	7 9.58778-	1 1.88080+	7 9.59168-	1 1.88250+	7 9.59194-	1	612	3	2 503
1.89240+	7 9.57809-	1 1.89320+	7 9.58703-	1 1.89687+	7 9.62828-	1	612	3	2 504
1.90000+	7 9.66238-	1 1.90240+	7 9.68882-	1 1.90343+	7 9.70552-	1	612	3	2 505
1.90954+	7 9.80466-	1 1.91240+	7 9.84854-	1 1.91295+	7 9.85121-	1	612	3	2 506
1.91769+	7 9.87248-	1 1.92240+	7 9.89353-	1 1.92902+	7 9.99872-	1	612	3	2 507
1.93240+	7 1.00511+	0 1.94219+	7 1.02231+	0 1.94240+	7 1.02268+	0	612	3	2 508
1.94509+	7 1.02418+	0 1.94830+	7 1.02584+	0 1.95000+	7 1.02672+	0	612	3	2 509
1.95239+	7 1.02802+	0 1.95581+	7 1.03157+	0 1.96116+	7 1.03712+	0	612	3	2 510
1.96239+	7 1.03834+	0 1.97132+	7 1.03254+	0 1.97240+	7 1.03185+	0	612	3	2 511
1.97723+	7 1.02570+	0 1.98240+	7 1.01928+	0 1.98800+	7 1.01556+	0	612	3	2 512
1.99240+	7 1.01259+	0 2.00000+	7 1.01054+	0			612	3	2 513
							612	3	0 514
6.01200+	3 1.18969+	1 0	99	0	0	0	612	3	3 515
0.0	+ 0 4.94639+	6 0	0	0	1	386	612	3	3 516
	386	2	0	0	0	0	612	3	3 517
1.00000-	5 1.77556-	1 1.28124-	5 1.56863-	1 1.56249-	5 1.42045-	1	612	3	3 518
2.12498-	5 1.21803-	1 2.68747-	5 1.08309-	1 3.24998-	5 9.84906-	2	612	3	3 519
4.37497-	5 8.48883-	2 5.49999-	5 7.57102-	2 6.62496-	5 6.89832-	2	612	3	3 520
7.74997-	5 6.37801-	2 1.00000-	4 5.61481-	2 1.28124-	4 4.96044-	2	612	3	3 521
1.56249-	4 4.49187-	2 2.12498-	4 3.85174-	2 2.68747-	4 3.42502-	2	612	3	3 522
3.24998-	4 3.11455-	2 4.37497-	4 2.68440-	2 5.49999-	4 2.39417-	2	612	3	3 523
6.62496-	4 2.18144-	2 7.74997-	4 2.01690-	2 1.00000-	3 1.77556-	2	612	3	3 524
1.28124-	3 1.56863-	2 1.56249-	3 1.42045-	2 2.12498-	3 1.21803-	2	612	3	3 525
2.68748-	3 1.08309-	2 3.24998-	3 9.84906-	3 4.37497-	3 8.48883-	3	612	3	3 526
5.49999-	3 7.57102-	3 6.62497-	3 6.89832-	3 7.74997-	3 6.37801-	3	612	3	3 527
1.00000-	2 5.61481-	3 1.38250-	2 4.77532-	3 1.76500-	2 4.22632-	3	612	3	3 528
2.14750-	2 3.83150-	3 2.53000-	2 3.53000-	3 3.46374-	2 3.01691-	3	612	3	3 529
4.39748-	2 2.67752-	3 5.33123-	2 2.43176-	3 6.26499-	2 2.24324-	3	612	3	3 530
8.13247-	2 1.96890-	3 1.00000-	1 1.77556-	3 1.28125-	1 1.56862-	3	612	3	3 531
1.56250-	1 1.42045-	3 2.12500-	1 1.21802-	3 2.68750-	1 1.08308-	3	612	3	3 532
3.25000-	1 9.84904-	4 4.37500-	1 8.48880-	4 5.50000-	1 7.57101-	4	612	3	3 533
6.62499-	1 6.89831-	4 7.75000-	1 6.37800-	4 1.00000+	0 5.61481-	4	612	3	3 534
1.28125+	0 4.96042-	4 1.56250+	0 4.49185-	4 2.12500+	0 3.85173-	4	612	3	3 535
2.68750+	0 3.42500-	4 3.25000+	0 3.11454-	4 4.37500+	0 2.68439-	4	612	3	3 536
5.50000+	0 2.39417-	4 6.62500+	0 2.18144-	4 7.75000+	0 2.01690-	4	612	3	3 537
1.00000+	1 1.77556-	4 1.28125+	1 1.56862-	4 1.56250+	1 1.42045-	4	612	3	3 538
2.12500+	1 1.21802-	4 2.68750+	1 1.08308-	4 3.25000+	1 9.84903-	5	612	3	3 539
4.37500+	1 8.48880-	5 5.50000+	1 7.57101-	5 6.62500+	1 6.89830-	5	612	3	3 540
7.75000+	1 6.37800-	5 1.00000+	2 5.61481-	5 1.28125+	2 4.96042-	5	612	3	3 541
1.56250+	2 4.49185-	5 2.12500+	2 3.85173-	5 2.68750+	2 3.42500-	5	612	3	3 542
3.25000+	2 3.11454-	5 4.37500+	2 2.68439-	5 5.50000+	2 2.39417-	5	612	3	3 543
6.62500+	2 2.18144-	5 7.75000+	2 2.01690-	5 1.00000+	3 1.77556-	5	612	3	3 544

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
1.28125+	3 1.56862-	5 1.56250+	3 1.42045-	5 2.12500+	3 1.21802-	5	612	3	3 545
2.68750+	3 1.08308-	5 3.25000+	3 9.84904-	6 4.37500+	3 8.48880-	6	612	3	3 546
5.50000+	3 7.57101-	6 6.62500+	3 6.89831-	6 7.75000+	3 6.37801-	6	612	3	3 547
1.00000+	4 5.61481-	6 1.30048+	4 4.92361-	6 1.60096+	4 4.43757-	6	612	3	3 548
2.20193+	4 3.78384-	6 2.80289+	4 3.35376-	6 3.40386+	4 3.04333-	6	612	3	3 549
4.60579+	4 2.61627-	6 5.80773+	4 2.32987-	6 7.62084+	4 2.13288-	6	612	3	3 550
1.00000+	5 2.00438-	6 1.33352+	5 1.94843-	6 1.77828+	5 1.98510-	6	612	3	3 551
2.37137+	5 2.13036-	6 3.16228+	5 2.40750-	6 4.21696+	5 2.84934-	6	612	3	3 552
5.62341+	5 3.50111-	6 1.00000+	6 5.70267-	6 1.14141+	6 6.43858-	6	612	3	3 553
2.00000+	6 1.05688-	5 2.22474+	6 1.16629-	5 3.00000+	6 1.33971-	5	612	3	3 554
3.30808+	6 1.40915-	5 4.00000+	6 1.65982-	5 4.39141+	6 1.80192-	5	612	3	3 555
4.81200+	6 2.08322-	5 4.96456+	6 5.73296-	2 5.00000+	6 5.77050-	2	612	3	3 556
5.00583+	6 5.77668-	2 5.04711+	6 6.01797-	2 5.08838+	6 6.43442-	2	612	3	3 557
5.12966+	6 7.00353-	2 5.21221+	6 8.50995-	2 5.29476+	6 1.03576-	1	612	3	3 558
5.45986+	6 1.43578-	1 5.47474+	6 1.46811-	1 5.54241+	6 1.61513-	1	612	3	3 559
5.62496+	6 1.75673-	1 5.72187+	6 1.92487-	1 5.81878+	6 2.13629-	1	612	3	3 560
6.00000+	6 2.54708-	1 6.01259+	6 2.57561-	1 6.10950+	6 2.74685-	1	612	3	3 561
6.18075+	6 2.82121-	1 6.20641+	6 2.84816-	1 6.30331+	6 2.85154-	1	612	3	3 562
6.40022+	6 7.22813-	1 6.51507+	6 2.41003-	1 6.55808+	6 2.25834-	1	612	3	3 563
6.62993+	6 2.00494-	1 6.74478+	6 1.63887-	1 6.80221+	6 1.50986-	1	612	3	3 564
6.85963+	6 1.43784-	1 6.89911+	6 1.42920-	1 6.93859+	6 1.45359-	1	612	3	3 565
7.00000+	6 1.55823-	1 7.01756+	6 1.58815-	1 7.09652+	6 1.81482-	1	612	3	3 566
7.17548+	6 2.10685-	1 7.26547+	6 2.49050-	1 7.33340+	6 2.87798-	1	612	3	3 567
7.44282+	6 3.46103-	1 7.49132+	6 3.71617-	1 7.52722+	6 3.83035-	1	612	3	3 568
7.56311+	6 3.85726-	1 7.60671+	6 3.78970-	1 7.61858+	6 3.76260-	1	612	3	3 569
7.63489+	6 3.74443-	1 7.64141+	6 3.73184-	1 7.64234+	6 3.73005-	1	612	3	3 570
7.66609+	6 3.71645-	1 7.68984+	6 3.72933-	1 7.70667+	6 3.75843-	1	612	3	3 571
7.73734+	6 3.84438-	1 7.74257+	6 3.86307-	1 7.77846+	6 4.04928-	1	612	3	3 572
7.78485+	6 4.09882-	1 7.83235+	6 4.45775-	1 7.83588+	6 4.48030-	1	612	3	3 573
7.87985+	6 4.86435-	1 7.88700+	6 4.91149-	1 7.89331+	6 4.95322-	1	612	3	3 574
7.92736+	6 5.22499-	1 7.95111+	6 5.36202-	1 7.97486+	6 5.45634-	1	612	3	3 575
8.00000+	6 5.52265-	1 8.00816+	6 5.54417-	1 8.06559+	6 5.65056-	1	612	3	3 576
8.11420+	6 5.64539-	1 8.12302+	6 5.64346-	1 8.18044+	6 5.45661-	1	612	3	3 577
8.23787+	6 5.03362-	1 8.25355+	6 4.89783-	1 8.29700+	6 4.54209-	1	612	3	3 578
8.32322+	6 4.33091-	1 8.33478+	6 4.24489-	1 8.39289+	6 3.92835-	1	612	3	3 579
8.43168+	6 3.74948-	1 8.46256+	6 3.65731-	1 8.49739+	6 3.58005-	1	612	3	3 580
8.52858+	6 3.52911-	1 8.53224+	6 3.52773-	1 8.62550+	6 3.51406-	1	612	3	3 581
8.65258+	6 3.53417-	1 8.72240+	6 3.59893-	1 8.72474+	6 3.60232-	1	612	3	3 582
8.77292+	6 3.67210-	1 8.81931+	6 3.76095-	1 8.83309+	6 3.78795-	1	612	3	3 583
8.89326+	6 3.93513-	1 8.95343+	6 4.11947-	1 9.00000+	6 4.29703-	1	612	3	3 584
9.01313+	6 4.34709-	1 9.01360+	6 4.34865-	1 9.05794+	6 4.54669-	1	612	3	3 585
9.10228+	6 4.79235-	1 9.17105+	6 5.20298-	1 9.19095+	6 5.32510-	1	612	3	3 586
9.23528+	6 5.56394-	1 9.27962+	6 5.74582-	1 9.32396+	6 5.84451-	1	612	3	3 587
9.32897+	6 5.84331-	1 9.36830+	6 5.86883-	1 9.44430+	6 5.76458-	1	612	3	3 588
9.48689+	6 5.66776-	1 9.50000+	6 5.65261-	1 9.52031+	6 5.63010-	1	612	3	3 589
9.56586+	6 5.55767-	1 9.59631+	6 5.53928-	1 9.64482+	6 5.50708-	1	612	3	3 590
9.67232+	6 5.48188-	1 9.70224+	6 5.48136-	1 9.70398+	6 5.47882-	1	612	3	3 591
9.73566+	6 5.47581-	1 9.75967+	6 5.50697-	1 9.79899+	6 5.49326-	1	612	3	3 592
9.80808+	6 5.49711-	1 9.86233+	6 5.52005-	1 9.87452+	6 5.51873-	1	612	3	3 593
9.92567+	6 5.44481-	1 9.98938+	6 5.28276-	1 1.00000+	7 5.25248-	1	612	3	3 594
1.00333+	7 5.23144-	1 1.01042+	7 5.15198-	1 1.01410+	7 5.13804-	1	612	3	3 595
1.02000+	7 5.11394-	1 1.02478+	7 4.98149-	1 1.02487+	7 4.97983-	1	612	3	3 596
1.03564+	7 4.82664-	1 1.03914+	7 4.78855-	1 1.04520+	7 4.77246-	1	612	3	3 597
1.05654+	7 4.79739-	1 1.06785+	7 4.82784-	1 1.07744+	7 4.87025-	1	612	3	3 598
1.08914+	7 4.94853-	1 1.09408+	7 4.98158-	1 1.09656+	7 4.99095-	1	612	3	3 599

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
1.09834+	7	4.98765-	1	1.10000+	7	4.98924-	1	1.10879+	7	4.99193-	1	612	3	3	600	
1.11092+	7	4.99784-	1	1.11382+	7	4.98428-	1	1.11924+	7	4.96064-	1	612	3	3	601	
1.12528+	7	4.94810-	1	1.13356+	7	4.90566-	1	1.14146+	7	4.86837-	1	612	3	3	602	
1.16168+	7	4.79012-	1	1.16227+	7	4.78812-	1	1.16835+	7	4.77443-	1	612	3	3	603	
1.17300+	7	4.77686-	1	1.17304+	7	4.77684-	1	1.18309+	7	4.77309-	1	612	3	3	604	
1.19747+	7	4.78257-	1	1.20000+	7	4.78424-	1	1.20391+	7	4.78682-	1	612	3	3	605	
1.20412+	7	4.78715-	1	1.21142+	7	4.79231-	1	1.22472+	7	4.82999-	1	612	3	3	606	
1.22533+	7	4.83244-	1	1.24655+	7	4.89092-	1	1.25000+	7	4.89439-	1	612	3	3	607	
1.25200+	7	4.88275-	1	1.25448+	7	4.86830-	1	1.26636+	7	4.81670-	1	612	3	3	608	
1.26777+	7	4.81230-	1	1.28899+	7	4.69837-	1	1.29755+	7	4.64967-	1	612	3	3	609	
1.30000+	7	4.63800-	1	1.30581+	7	4.65390-	1	1.30799+	7	4.65987-	1	612	3	3	610	
1.31274+	7	4.67665-	1	1.33097+	7	4.77192-	1	1.33649+	7	4.80077-	1	612	3	3	611	
1.33496+	7	4.88678-	1	1.35208+	7	4.90368-	1	1.36024+	7	4.95995-	1	612	3	3	612	
1.36450+	7	4.99337-	1	1.37045+	7	5.04031-	1	1.38369+	7	5.14478-	1	612	3	3	613	
1.38400+	7	5.14711-	1	1.40000+	7	5.27829-	1	1.40993+	7	5.35969-	1	612	3	3	614	
1.41414+	7	5.39421-	1	1.42676+	7	5.49769-	1	1.43150+	7	5.53130-	1	612	3	3	615	
1.43290+	7	5.54076-	1	1.45479+	7	5.64571-	1	1.45644+	7	5.65362-	1	612	3	3	616	
1.46983+	7	5.71781-	1	1.47900+	7	5.75753-	1	1.48866+	7	5.78835-	1	612	3	3	617	
1.49248+	7	5.80054-	1	1.49965+	7	5.80071-	1	1.50000+	7	5.80072-	1	612	3	3	618	
1.50473+	7	5.80410-	1	1.50721+	7	5.80645-	1	1.50969+	7	5.80902-	1	612	3	3	619	
1.51217+	7	5.81178-	1	1.51465+	7	5.81474-	1	1.51962+	7	5.82118-	1	612	3	3	620	
1.52152+	7	5.82388-	1	1.52247+	7	5.82582-	1	1.52458+	7	5.83013-	1	612	3	3	621	
1.53450+	7	5.85184-	1	1.54329+	7	5.87225-	1	1.54442+	7	5.87408-	1	612	3	3	622	
1.55000+	7	5.88338-	1	1.55206+	7	5.88855-	1	1.56427+	7	5.88733-	1	612	3	3	623	
1.57320+	7	5.88549-	1	1.57419+	7	5.88591-	1	1.58412+	7	5.88842-	1	612	3	3	624	
1.58500+	7	5.88852-	1	1.58938+	7	5.89031-	1	1.60000+	7	5.89467-	1	612	3	3	625	
1.60269+	7	5.89603-	1	1.60758+	7	5.89824-	1	1.61164+	7	5.89887-	1	612	3	3	626	
1.62127+	7	5.88060-	1	1.62489+	7	5.87360-	1	1.63081+	7	5.86597-	1	612	3	3	627	
1.63985+	7	5.85431-	1	1.65000+	7	5.84099-	1	1.65843+	7	5.82515-	1	612	3	3	628	
1.67122+	7	5.79794-	1	1.67448+	7	5.78462-	1	1.67657+	7	5.77562-	1	612	3	3	629	
1.69052+	7	5.72470-	1	1.70000+	7	5.69177-	1	1.70657+	7	5.67076-	1	612	3	3	630	
1.71459+	7	5.64817-	1	1.72261+	7	5.62868-	1	1.72700+	7	5.61823-	1	612	3	3	631	
1.72825+	7	5.61515-	1	1.73615+	7	5.60089-	1	1.73781+	7	5.59839-	1	612	3	3	632	
1.73914+	7	5.59596-	1	1.75000+	7	5.57614-	1	1.75301+	7	5.57036-	1	612	3	3	633	
1.76830+	7	5.53530-	1	1.76884+	7	5.53423-	1	1.77994+	7	5.51218-	1	612	3	3	634	
1.78342+	7	5.50501-	1	1.79038+	7	5.48845-	1	1.80000+	7	5.45839-	1	612	3	3	635	
1.80044+	7	5.45692-	1	1.81371+	7	5.41795-	1	1.81382+	7	5.41763-	1	612	3	3	636	
1.82500+	7	5.38357-	1	1.83162+	7	5.36338-	1	1.83259+	7	5.36071-	1	612	3	3	637	
1.84422+	7	5.33288-	1	1.84747+	7	5.32485-	1	1.84866+	7	5.32191-	1	612	3	3	638	
1.85000+	7	5.31896-	1	1.85857+	7	5.29888-	1	1.86473+	7	5.28444-	1	612	3	3	639	
1.86871+	7	5.27629-	1	1.88080+	7	5.24992-	1	1.89320+	7	5.22682-	1	612	3	3	640	
1.89687+	7	5.21978-	1	1.90000+	7	5.21484-	1	1.90343+	7	5.20904-	1	612	3	3	641	
1.90954+	7	5.19869-	1	1.91295+	7	5.19591-	1	1.91769+	7	5.19378-	1	612	3	3	642	
1.92902+	7	5.18893-	1	1.94219+	7	5.18840-	1	1.94509+	7	5.18814-	1	612	3	3	643	
1.94830+	7	5.18918-	1	1.95000+	7	5.18972-	1	1.95581+	7	5.19007-	1	612	3	3	644	
1.96116+	7	5.19037-	1	1.97132+	7	5.19538-	1	1.97723+	7	5.19755-	1	612	3	3	645	
1.98800+	7	5.19805-	1	2.00000+	7	5.20014-	1					612	3	3	646	
												612	3	0	647	
6.01200+	3	1.18969+	1		0		99		0		0	612	3	4	648	
0.0	+	0-4.43910+	6		0		0		1		124	612	3	4	649	
	124		2		0		0		0		0	612	3	4	650	
4.81200+	6	0.0	+	0	4.96456+	6	5.73077-	2	5.00583+	6	5.77446-	2	612	3	4	651
5.04711+	6	6.01573-	2	5.08838+	6	6.43215-	2	5.12966+	6	7.00124-	2	612	3	4	652	
5.21221+	6	8.50759-	2	5.29476+	6	1.03552-	1	5.45986+	6	1.43553-	1	612	3	4	653	
5.54241+	6	1.61487-	1	5.62496+	6	1.75646-	1	5.72187+	6	1.92458-	1	612	3	4	654	

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
5.81878+	6	2.13599-	1	6.01259+	6	2.57528-	1	6.10950+	6	2.74650-	1	612	3	4	655	
6.20641+	6	2.84762-	1	6.30331+	6	2.85034-	1	6.40022+	6	2.72627-	1	612	3	4	656	
6.51507+	6	2.40739-	1	6.62993+	6	2.00151-	1	6.74478+	6	1.63465-	1	612	3	4	657	
6.80221+	6	1.50524-	1	6.85963+	6	1.43283-	1	6.89911+	6	1.42391-	1	612	3	4	658	
6.93859+	6	1.44803-	1	7.01756+	6	1.58205-	1	7.09652+	6	1.80817-	1	612	3	4	659	
7.17548+	6	2.09966-	1	7.33340+	6	2.77182-	1	7.49132+	6	3.38467-	1	612	3	4	660	
7.52722+	6	3.44931-	1	7.56311+	6	3.42669-	1	7.63489+	6	3.21643-	1	612	3	4	661	
7.70667+	6	2.94754-	1	7.74257+	6	2.85159-	1	7.77846+	6	2.81360-	1	612	3	4	662	
7.83588+	6	2.90010-	1	7.88700+	6	3.09708-	1	7.89331+	6	3.12152-	1	612	3	4	663	
8.00816+	6	3.72349-	1	8.06559+	6	3.97942-	1	8.12302+	6	4.12286-	1	612	3	4	664	
8.18044+	6	4.09200-	1	8.23787+	6	3.82502-	1	8.29700+	6	3.47359-	1	612	3	4	665	
8.33478+	6	3.25407-	1	8.43168+	6	2.88429-	1	8.52858+	6	2.67210-	1	612	3	4	666	
8.62550+	6	2.58176-	1	8.72240+	6	2.57761-	1	8.81931+	6	2.62395-	1	612	3	4	667	
9.01313+	6	2.72522-	1	9.17105+	6	2.72926-	1	9.32897+	6	2.75950-	1	612	3	4	668	
9.48689+	6	2.93003-	1	9.50000+	6	2.95885-	1	9.56586+	6	3.10668-	1	612	3	4	669	
9.64482+	6	3.36181-	1	9.70224+	6	3.53283-	1	9.75967+	6	3.62114-	1	612	3	4	670	
9.87452+	6	3.60868-	1	9.98938+	6	3.44265-	1	1.00000+	7	3.42403-	1	612	3	4	671	
1.01042+	7	3.47262-	1	1.02000+	7	3.58836-	1	1.02478+	7	3.53318-	1	612	3	4	672	
1.03914+	7	3.49923-	1	1.04520+	7	3.53475-	1	1.06785+	7	3.77749-	1	612	3	4	673	
1.09408+	7	4.10398-	1	1.09656+	7	4.12763-	1	1.10000+	7	4.14104-	1	612	3	4	674	
1.11092+	7	4.17655-	1	1.11382+	7	4.16437-	1	1.12528+	7	4.11987-	1	612	3	4	675	
1.13356+	7	4.06247-	1	1.14146+	7	4.01091-	1	1.16227+	7	3.89277-	1	612	3	4	676	
1.16835+	7	3.86516-	1	1.17300+	7	3.85695-	1	1.17304+	7	3.85684-	1	612	3	4	677	
1.18309+	7	3.83010-	1	1.20391+	7	3.79617-	1	1.21142+	7	3.79092-	1	612	3	4	678	
1.22472+	7	3.80989-	1	1.25000+	7	3.87566-	1	1.25200+	7	3.86720-	1	612	3	4	679	
1.25448+	7	3.85671-	1	1.26636+	7	3.82405-	1	1.29755+	7	3.77640-	1	612	3	4	680	
1.30000+	7	3.77493-	1	1.30799+	7	3.83004-	1	1.33097+	7	4.00679-	1	612	3	4	681	
1.34963+	7	4.15033-	1	1.37045+	7	4.31777-	1	1.38369+	7	4.42425-	1	612	3	4	682	
1.40000+	7	4.54939-	1	1.40993+	7	4.62559-	1	1.42676+	7	4.75472-	1	612	3	4	683	
1.43290+	7	4.79502-	1	1.45479+	7	4.89581-	1	1.46983+	7	4.96505-	1	612	3	4	684	
1.49248+	7	5.05885-	1	1.49965+	7	5.06583-	1	1.50000+	7	5.06618-	1	612	3	4	685	
1.52152+	7	5.09574-	1	1.55206+	7	5.15666-	1	1.57320+	7	5.14368-	1	612	3	4	686	
1.58938+	7	5.14400-	1	1.61164+	7	5.14443-	1	1.62489+	7	5.11754-	1	612	3	4	687	
1.67122+	7	5.05334-	1	1.67657+	7	5.03546-	1	1.72825+	7	4.89664-	1	612	3	4	688	
1.76884+	7	4.81472-	1	1.77994+	7	4.79232-	1	1.79038+	7	4.77048-	1	612	3	4	689	
1.81371+	7	4.70428-	1	1.83162+	7	4.65345-	1	1.85857+	7	4.58497-	1	612	3	4	690	
1.90343+	7	4.47097-	1	1.90954+	7	4.45544-	1	1.94830+	7	4.39101-	1	612	3	4	691	
2.00000+	7	4.30508-	1									612	3	4	692	
												612	3	0	693	
6.01200+	3	1.18969+	1		0		1		0		0	612	3	51	694	
0.0	+	0-4.43910+	6		0		0		1		81	612	3	51	695	
		81	2		0		0		0		0	612	3	51	696	
4.81200+	6	0.0	+	0	4.96456+	6	5.73077-	2	5.00583+	6	5.77446-	2	612	3	51	697
5.04711+	6	6.01573-	2	5.08838+	6	6.43215-	2	5.12966+	6	7.00124-	2	612	3	51	698	
5.21221+	6	8.50759-	2	5.29476+	6	1.03552-	1	5.45986+	6	1.43553-	1	612	3	51	699	
5.54241+	6	1.61487-	1	5.62496+	6	1.75646-	1	5.72187+	6	1.92458-	1	612	3	51	700	
5.81878+	6	2.13599-	1	6.01259+	6	2.57528-	1	6.10950+	6	2.74650-	1	612	3	51	701	
6.20641+	6	2.84762-	1	6.30331+	6	2.85034-	1	6.40022+	6	2.72627-	1	612	3	51	702	
6.51507+	6	2.40739-	1	6.62993+	6	2.00151-	1	6.74478+	6	1.63465-	1	612	3	51	703	
6.80221+	6	1.50524-	1	6.85963+	6	1.43283-	1	6.89911+	6	1.42391-	1	612	3	51	704	
6.93859+	6	1.44803-	1	7.01756+	6	1.58205-	1	7.09652+	6	1.80817-	1	612	3	51	705	
7.17548+	6	2.09966-	1	7.33340+	6	2.77182-	1	7.49132+	6	3.38467-	1	612	3	51	706	
7.52722+	6	3.44931-	1	7.56311+	6	3.42669-	1	7.63489+	6	3.21643-	1	612	3	51	707	
7.70667+	6	2.94754-	1	7.74257+	6	2.85159-	1	7.77846+	6	2.81360-	1	612	3	51	708	
7.83588+	6	2.90010-	1	7.89331+	6	3.12140-	1	8.00816+	6	3.72117-	1	612	3	51	709	

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
8.06559+	6 3.97600-	1 8.12302+	6 4.11834-	1 8.18044+	6 4.08638-	1	612	3 51	710
8.23787+	6 3.81831-	1 8.33478+	6 3.24048-	1 8.43168+	6 2.85595-	1	612	3 51	711
8.52858+	6 2.62902-	1 8.62550+	6 2.52394-	1 8.72240+	6 2.50505-	1	612	3 51	712
8.81931+	6 2.53664-	1 9.01313+	6 2.60842-	1 9.17105+	6 2.58844-	1	612	3 51	713
9.32897+	6 2.59465-	1 9.48689+	6 2.74116-	1 9.56586+	6 2.90270-	1	612	3 51	714
9.64482+	6 3.14210-	1 9.70224+	6 3.30169-	1 9.75967+	6 3.37856-	1	612	3 51	715
9.87452+	6 3.34323-	1 9.98938+	6 3.15433-	1 1.01042+	7 2.93011-	1	612	3 51	716
1.02478+	7 2.75621-	1 1.03914+	7 2.71412-	1 1.06785+	7 2.86618-	1	612	3 51	717
1.09656+	7 3.06791-	1 1.11092+	7 3.08790-	1 1.12528+	7 3.00092-	1	612	3 51	718
1.16835+	7 2.60873-	1 1.21142+	7 2.33602-	1 1.25448+	7 2.15491-	1	612	3 51	719
1.29755+	7 2.03752-	1 1.38369+	7 1.88241-	1 1.42676+	7 1.78893-	1	612	3 51	720
1.46983+	7 1.64767-	1 1.52152+	7 1.45421-	1 1.57320+	7 1.29287-	1	612	3 51	721
1.62489+	7 1.16424-	1 1.67657+	7 1.06894-	1 1.72825+	7 1.00755-	1	612	3 51	722
1.77994+	7 9.80678-	2 1.83162+	7 9.50000-	2 2.00000+	7 9.00000-	2	612	3 51	723
							612	3 0	724
6.01200+	3 1.18969+	1 0	2	0	0	0	612	3 52	725
0.0	+ 0-7.65400+	6 0	0	0	1	11	612	3 52	726
	11	2	0	0	0	0	612	3 52	727
8.29700+	6 0.0	+ 0 9.50000+	6 1.60000-	2 1.00000+	7 2.50000-	2	612	3 52	728
1.02000+	7 7.30000-	2 1.10000+	7 7.60000-	2 1.17300+	7 7.40000-	2	612	3 52	729
1.25000+	7 6.50000-	2 1.30000+	7 2.50000-	2 1.40000+	7 2.00000-	2	612	3 52	730
1.50000+	7 1.50000-	2 2.00000+	7 1.00000-	2			612	3 52	731
							612	3 0	732
6.01200+	3 1.18969+	1 0	3	0	0	0	612	3 53	733
0.0	+ 0-9.64100+	6 0	0	1	18	18	612	3 53	734
	18	2	0	0	0	0	612	3 53	735
1.04520+	7 0.0	+ 0 1.09408+	7 2.37274-	2 1.11382+	7 2.75605-	2	612	3 53	736
1.13356+	7 3.20148-	2 1.17304+	7 4.23428-	2 1.25200+	7 6.55739-	2	612	3 53	737
1.33097+	7 8.63269-	2 1.37045+	7 9.35574-	2 1.40993+	7 9.75083-	2	612	3 53	738
1.45479+	7 9.83396-	2 1.49965+	7 9.65568-	2 1.58938+	7 8.69740-	2	612	3 53	739
1.76884+	7 5.65129-	2 1.81371+	7 4.92057-	2 1.85857+	7 4.29340-	2	612	3 53	740
1.90343+	7 3.81542-	2 1.94830+	7 3.53224-	2 2.00000+	7 3.48948-	2	612	3 53	741
							612	3 0	742
6.01200+	3 1.18969+	1 0	99	0	0	0	612	3 91	743
0.0	+ 0-7.27482+	6 0	0	1	31	31	612	3 91	744
	31	2	0	0	0	0	612	3 91	745
7.88700+	6 0.0	+ 0 1.13356+	7 6.60000-	3 1.14146+	7 6.78676-	3	612	3 91	746
1.16227+	7 9.04854-	3 1.17304+	7 1.14429-	2 1.18309+	7 1.33495-	2	612	3 91	747
1.20391+	7 1.94479-	2 1.22472+	7 2.74783-	2 1.25200+	7 4.12119-	2	612	3 91	748
1.26636+	7 4.88924-	2 1.30799+	7 7.62432-	2 1.33097+	7 9.31669-	2	612	3 91	749
1.34963+	7 1.08396-	1 1.37045+	7 1.26117-	1 1.40993+	7 1.63001-	1	612	3 91	750
1.43290+	7 1.86334-	1 1.45479+	7 2.04281-	1 1.49248+	7 2.37378-	1	612	3 91	751
1.49965+	7 2.41403-	1 1.55206+	7 2.74340-	1 1.58938+	7 2.88059-	1	612	3 91	752
1.61164+	7 2.97643-	1 1.67122+	7 3.11083-	1 1.76884+	7 3.14003-	1	612	3 91	753
1.79038+	7 3.14499-	1 1.81371+	7 3.13296-	1 1.85857+	7 3.09949-	1	612	3 91	754
1.90343+	7 3.05110-	1 1.90954+	7 3.04185-	1 1.94830+	7 3.01727-	1	612	3 91	755
2.00000+	7 2.95613-	1					612	3 91	756
							612	3 0	757
6.01200+	3 1.18969+	1 0	99	0	0	0	612	3102	758
0.0	+ 0 4.94639+	6 0	0	1	60	60	612	3102	759
	60	5	0	0	0	0	612	3102	760
1.00000-	5 1.77556-	1 1.00000-	4 5.61481-	2 1.00000-	3 1.77556-	2	612	3102	761
1.00000-	2 5.61481-	3 2.53000-	2 3.53000-	3 1.00000-	1 1.77556-	3	612	3102	762
1.00000+	0 5.61481-	4 1.00000+	1 1.77556-	4 1.00000+	2 5.61481-	5	612	3102	763
1.00000+	3 1.77556-	5 1.00000+	4 5.61481-	6 5.80773+	4 2.32987-	6	612	3102	764

.....10.....	20.....	30.....	40.....	50.....	60.....		MAT	MF	MT	SEQ
7.62084+	4	2.13288-	6	1.00000+	5	2.00438-	6	1.33352+	5	1.94843-	6	612	3102	765	
1.77828+	5	1.98510-	6	2.37137+	5	2.13036-	6	3.16228+	5	2.40750-	6	612	3102	766	
4.21696+	5	2.84934-	6	5.62341+	5	3.50111-	6	1.00000+	6	5.70267-	6	612	3102	767	
1.14141+	6	6.43858-	6	2.00000+	6	1.05688-	5	2.22474+	6	1.16629-	5	612	3102	768	
3.00000+	6	1.33971-	5	3.30808+	6	1.40915-	5	4.00000+	6	1.65982-	5	612	3102	769	
4.39141+	6	1.80192-	5	5.00000+	6	2.21377-	5	5.47474+	6	2.53523-	5	612	3102	770	
6.00000+	6	3.34032-	5	6.55808+	6	4.19587-	5	7.00000+	6	5.17311-	5	612	3102	771	
7.64141+	6	6.59162-	5	8.00000+	6	7.34098-	5	8.72474+	6	8.85561-	5	612	3102	772	
9.00000+	6	8.81852-	5	9.80808+	6	8.70973-	5	1.00000+	7	8.47797-	5	612	3102	773	
1.08914+	7	7.40154-	5	1.10000+	7	7.27458-	5	1.19747+	7	6.13505-	5	612	3102	774	
1.20000+	7	6.10971-	5	1.30000+	7	5.10812-	5	1.30581+	7	5.04995-	5	612	3102	775	
1.35208+	7	6.03051-	5	1.40000+	7	7.04604-	5	1.41414+	7	7.34572-	5	612	3102	776	
1.45644+	7	9.10014-	5	1.50000+	7	1.09069-	4	1.52247+	7	1.18390-	4	612	3102	777	
1.60000+	7	1.58156-	4	1.63081+	7	1.73959-	4	1.70000+	7	2.02002-	4	612	3102	778	
1.73914+	7	2.17865-	4	1.80000+	7	2.27252-	4	1.84747+	7	2.34574-	4	612	3102	779	
1.90000+	7	2.32031-	4	1.95581+	7	2.29329-	4	2.00000+	7	2.17352-	4	612	3102	780	
												612	3	0	781
6.01200+	3	1.18969+	1		0		99		0			0	612	3103	782
0.0		+ 0-	1.25871+	7		0			1			33	612	3103	783
		33		2		0			0			0	612	3103	784
1.36450+	7	0.0	+ 0	1.50473+	7	6.47784-	4	1.50721+	7	7.17661-	4	612	3103	785	
1.50969+	7	8.08816-	4	1.51217+	7	9.20047-	4	1.51465+	7	1.05017-	3	612	3103	786	
1.51962+	7	1.36233-	3	1.52458+	7	1.73582-	3	1.53450+	7	2.62866-	3	612	3103	787	
1.54442+	7	3.65300-	3	1.56427+	7	5.79186-	3	1.57419+	7	6.75453-	3	612	3103	788	
1.58412+	7	7.54492-	3	1.60269+	7	8.75758-	3	1.62127+	7	9.87279-	3	612	3103	789	
1.63985+	7	1.09194-	2	1.65843+	7	1.19264-	2	1.67448+	7	1.23966-	2	612	3103	790	
1.69052+	7	1.25110-	2	1.70657+	7	1.29083-	2	1.71459+	7	1.34124-	2	612	3103	791	
1.72261+	7	1.42268-	2	1.73781+	7	1.58462-	2	1.75301+	7	1.69834-	2	612	3103	792	
1.78342+	7	1.81296-	2	1.81382+	7	1.83031-	2	1.84422+	7	1.81417-	2	612	3103	793	
1.86871+	7	1.78253-	2	1.89320+	7	1.71866-	2	1.91769+	7	1.64113-	2	612	3103	794	
1.94219+	7	1.56848-	2	1.97132+	7	1.46808-	2	2.00000+	7	1.33326-	2	612	3103	795	
												612	3	0	796
6.01200+	3	1.18969+	1		0		99		0			0	612	3104	797
0.0		+ 0-	1.37323+	7		0			1			16	612	3104	798
		16		2		0			0			0	612	3104	799
1.48866+	7	0.0	+ 0	1.50000+	7	6.09715-	8	1.55000+	7	1.45108-	3	612	3104	800	
1.58500+	7	5.41683-	3	1.60000+	7	7.56658-	3	1.65000+	7	1.52133-	2	612	3104	801	
1.70000+	7	2.00227-	2	1.72700+	7	2.33654-	2	1.75000+	7	2.60000-	2	612	3104	802	
1.80000+	7	3.12500-	2	1.82500+	7	3.33449-	2	1.85000+	7	3.54327-	2	612	3104	803	
1.90000+	7	3.88940-	2	1.95000+	7	4.17785-	2	1.98800+	7	4.29680-	2	612	3104	804	
2.00000+	7	4.34970-	2									612	3104	805	
												612	3	0	806
6.01200+	3	1.18969+	1		0		0		0			0	612	3107	807
0.0		+ 0-	5.70151+	6		0			1			81	612	3107	808
		81		2		0			0			0	612	3107	809
6.18075+	6	0.0	+ 0	7.26547+	6	7.23848-	4	7.44282+	6	2.63969-	2	612	3107	810	
7.60671+	6	4.90079-	2	7.61858+	6	4.97746-	2	7.64234+	6	5.40868-	2	612	3107	811	
7.66609+	6	6.16234-	2	7.68984+	6	7.18078-	2	7.73734+	6	9.78130-	2	612	3107	812	
7.78485+	6	1.27491-	1	7.83235+	6	1.56227-	1	7.87985+	6	1.79411-	1	612	3107	813	
7.92736+	6	1.92428-	1	7.95111+	6	1.93683-	1	7.97486+	6	1.90666-	1	612	3107	814	
8.11420+	6	1.54381-	1	8.25355+	6	1.16521-	1	8.32322+	6	1.00887-	1	612	3107	815	
8.39289+	6	8.95222-	2	8.46256+	6	8.39820-	2	8.49739+	6	8.38815-	2	612	3107	816	
8.53224+	6	8.58204-	2	8.65258+	6	9.52695-	2	8.77292+	6	1.06945-	1	612	3107	817	
8.83309+	6	1.15592-	1	8.89326+	6	1.27166-	1	8.95343+	6	1.42456-	1	612	3107	818	
9.01360+	6	1.62254-	1	9.05794+	6	1.81944-	1	9.10228+	6	2.06397-	1	612	3107	819	

									10.....20.....30.....40.....50.....60.....			MAT	MF	MT	SEQ
9.19095+	6	2.59115-	1	9.23528+	6	2.82150-	1	9.27962+	6	2.99489-	1	612	3107	820		
9.32396+	6	3.08509-	1	9.36830+	6	3.06598-	1	9.44430+	6	2.87966-	1	612	3107	821		
9.52031+	6	2.62479-	1	9.59631+	6	2.33334-	1	9.67232+	6	2.03729-	1	612	3107	822		
9.70398+	6	1.94244-	1	9.73566+	6	1.89072-	1	9.79899+	6	1.87552-	1	612	3107	823		
9.86233+	6	1.90918-	1	9.92567+	6	1.90921-	1	1.00333+	7	1.79104-	1	612	3107	824		
1.01410+	7	1.62013-	1	1.02487+	7	1.44604-	1	1.03564+	7	1.31834-	1	612	3107	825		
1.05654+	7	1.14033-	1	1.07744+	7	9.72632-	2	1.09834+	7	8.52352-	2	612	3107	826		
1.10879+	7	8.21595-	2	1.11924+	7	8.16610-	2	1.16168+	7	8.93349-	2	612	3107	827		
1.20412+	7	9.90522-	2	1.22533+	7	1.02038-	1	1.24655+	7	1.02368-	1	612	3107	828		
1.26777+	7	9.89861-	2	1.28899+	7	9.08368-	2	1.31274+	7	8.09565-	2	612	3107	829		
1.33649+	7	7.50945-	2	1.36024+	7	7.23675-	2	1.38400+	7	7.18915-	2	612	3107	830		
1.43150+	7	7.41572-	2	1.47900+	7	7.48209-	2	1.54329+	7	6.83880-	2	612	3107	831		
1.60758+	7	5.74503-	2	1.73615+	7	3.17201-	2	1.76830+	7	2.62454-	2	612	3107	832		
1.80044+	7	2.17576-	2	1.83259+	7	1.85585-	2	1.84866+	7	1.75366-	2	612	3107	833		
1.86473+	7	1.69501-	2	1.88080+	7	1.68366-	2	1.89687+	7	1.72341-	2	612	3107	834		
1.91295+	7	1.81801-	2	1.92902+	7	1.97125-	2	1.94509+	7	2.18689-	2	612	3107	835		
1.96116+	7	2.46871-	2	1.97723+	7	2.82048-	2	2.00000+	7	3.24598-	2	612	3107	836		
												612	3	0	837	
6.01200+	3	1.18969+	1		0		0		0		0	612	3251	838		
0.0	+ 0	0.0	+ 0		0		0		1		280	612	3251	839		
	280		2		0		0		0		0	612	3251	840		
1.00000-	5	5.58026-	2	1.00000-	4	5.58026-	2	1.00000-	3	5.58026-	2	612	3251	841		
1.00000-	2	5.58026-	2	2.53000-	2	5.58026-	2	5.00000-	2	5.58026-	2	612	3251	842		
7.00000-	2	5.58026-	2	8.00000-	2	5.58026-	2	1.00000-	1	5.58026-	2	612	3251	843		
1.00000+	0	5.58026-	2	5.00000+	0	5.58026-	2	1.00000+	1	5.58051-	2	612	3251	844		
1.00000+	2	5.58256-	2	1.00000+	3	5.60301-	2	5.00000+	3	5.69339-	2	612	3251	845		
1.00000+	4	5.80535-	2	1.50000+	4	5.91598-	2	2.00000+	4	6.02559-	2	612	3251	846		
2.50000+	4	6.13399-	2	3.00000+	4	6.24143-	2	3.50000+	4	6.34755-	2	612	3251	847		
4.00000+	4	6.45268-	2	5.00000+	4	6.66003-	2	6.00000+	4	6.86312-	2	612	3251	848		
7.00000+	4	7.06197-	2	8.00000+	4	7.25672-	2	9.00000+	4	7.44747-	2	612	3251	849		
1.00000+	5	7.63454-	2	1.50000+	5	8.51336-	2	2.00000+	5	9.30501-	2	612	3251	850		
2.50000+	5	1.00192-	1	3.00000+	5	1.06598-	1	3.50000+	5	1.12355-	1	612	3251	851		
4.00000+	5	1.17479-	1	5.00000+	5	1.26097-	1	6.00000+	5	1.32752-	1	612	3251	852		
7.00000+	5	1.37677-	1	8.00000+	5	1.41063-	1	9.00000+	5	1.43049-	1	612	3251	853		
1.00000+	6	1.43772-	1	1.10000+	6	1.43277-	1	1.15000+	6	1.42601-	1	612	3251	854		
1.20000+	6	1.41645-	1	1.25000+	6	1.40405-	1	1.30000+	6	1.38888-	1	612	3251	855		
1.35000+	6	1.37092-	1	1.40000+	6	1.35015-	1	1.45000+	6	1.32645-	1	612	3251	856		
1.50000+	6	1.29979-	1	1.55000+	6	1.27006-	1	1.60000+	6	1.23713-	1	612	3251	857		
1.65000+	6	1.20079-	1	1.70000+	6	1.16075-	1	1.75000+	6	1.11656-	1	612	3251	858		
1.80000+	6	1.06752-	1	1.85000+	6	1.01240-	1	1.90000+	6	9.48626-	2	612	3251	859		
1.95000+	6	8.69712-	2	2.00000+	6	7.52450-	2	2.01000+	6	7.17481-	2	612	3251	860		
2.02000+	6	6.74173-	2	2.03000+	6	6.17418-	2	2.04000+	6	5.37065-	2	612	3251	861		
2.05000+	6	4.10457-	2	2.06000+	6	1.82859-	2	2.06100+	6	1.50988-	2	612	3251	862		
2.06200+	6	1.17153-	2	2.06300+	6	8.14329-	3	2.06400+	6	4.40113-	3	612	3251	863		
2.06500+	6	5.31691-	4	2.06600+	6	3.39360-	3	2.06700+	6	7.25549-	3	612	3251	864		
2.06800+	6	1.08697-	2	2.06900+	6	1.39661-	2	2.07000+	6	1.61639-	2	612	3251	865		
2.07100+	6	1.69554-	2	2.07200+	6	1.57260-	2	2.07300+	6	1.18155-	2	612	3251	866		
2.07400+	6	4.67090-	3	2.07500+	6	5.94573-	3	2.07600+	6	1.97381-	2	612	3251	867		
2.07700+	6	3.58097-	2	2.07800+	6	5.28120-	2	2.07900+	6	6.93061-	2	612	3251	868		
2.08000+	6	8.41241-	2	2.08100+	6	9.65757-	2	2.08200+	6	1.06452-	1	612	3251	869		
2.08300+	6	1.13895-	1	2.08400+	6	1.19231-	1	2.08500+	6	1.22851-	1	612	3251	870		
2.08600+	6	1.25128-	1	2.08700+	6	1.26384-	1	2.08800+	6	1.26883-	1	612	3251	871		
2.08900+	6	1.26830-	1	2.09000+	6	1.26381-	1	2.09100+	6	1.25654-	1	612	3251	872		
2.09200+	6	1.24735-	1	2.09300+	6	1.23691-	1	2.09400+	6	1.22566-	1	612	3251	873		
2.09500+	6	1.21397-	1	2.09600+	6	1.20209-	1	2.09700+	6	1.19018-	1	612	3251	874		

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
2.09800+	6 1.17837-	1 2.09900+	6 1.16675-	1 2.10000+	6 1.15539-	1	612	3251	875
2.11000+	6 1.05901-	1 2.12000+	6 9.89611-	2 2.13000+	6 9.37308-	2	612	3251	876
2.14000+	6 8.95558-	2 2.15000+	6 8.60562-	2 2.16000+	6 8.30116-	2	612	3251	877
2.17000+	6 8.02813-	2 2.18000+	6 7.77773-	2 2.19000+	6 7.54394-	2	612	3251	878
2.20000+	6 7.32271-	2 2.25000+	6 6.32151-	2 2.30000+	6 5.39534-	2	612	3251	879
2.35000+	6 4.48829-	2 2.40000+	6 3.58221-	2 2.45000+	6 2.67168-	2	612	3251	880
2.50000+	6 1.76495-	2 2.55000+	6 8.75673-	3 2.60000+	6 2.62784-	4	612	3251	881
2.65000+	6-7.47495-	3 2.70000+	6-1.38442-	2 2.72000+	6-1.57561-	2	612	3251	882
2.74000+	6-1.70876-	2 2.76000+	6-1.74950-	2 2.78000+	6-1.60117-	2	612	3251	883
2.80000+	6-7.00322-	3 2.80100+	6-5.81760-	3 2.80200+	6-4.44354-	3	612	3251	884
2.80300+	6-2.83652-	3 2.80400+	6-9.27536-	4 2.80500+	6 1.36969-	3	612	3251	885
2.80600+	6 4.19019-	3 2.80700+	6 7.73127-	3 2.80800+	6 1.23093-	2	612	3251	886
2.80900+	6 1.84519-	2 2.81000+	6 2.71134-	2 2.81100+	6 4.02002-	2	612	3251	887
2.81200+	6 6.20914-	2 2.81300+	6 1.05024-	1 2.81400+	6 2.11216-	1	612	3251	888
2.81500+	6 2.12926-	1 2.81600+	6-1.28258-	1 2.81700+	6-1.10181-	1	612	3251	889
2.81800+	6-8.87485-	2 2.81900+	6-7.48745-	2 2.82000+	6-6.55867-	2	612	3251	890
2.82100+	6-5.89933-	2 2.82200+	6-5.40869-	2 2.82300+	6-5.02956-	2	612	3251	891
2.82400+	6-4.72750-	2 2.82500+	6-4.48063-	2 2.82600+	6-4.27484-	2	612	3251	892
2.82700+	6-4.10020-	2 2.82800+	6-3.94968-	2 2.82900+	6-3.81833-	2	612	3251	893
2.83000+	6-3.70234-	2 2.83200+	6-3.50552-	2 2.83400+	6-3.34337-	2	612	3251	894
2.83600+	6-3.20543-	2 2.83800+	6-3.08511-	2 2.84000+	6-2.97773-	2	612	3251	895
2.84500+	6-2.74612-	2 2.85000+	6-2.54429-	2 2.86000+	6-2.16551-	2	612	3251	896
2.87000+	6-1.76222-	2 2.88000+	6-1.28747-	2 2.89000+	6-6.97818-	3	612	3251	897
2.90000+	6 5.83731-	4 2.91000+	6 1.05184-	2 2.92000+	6 2.38264-	2	612	3251	898
2.93000+	6 4.19369-	2 2.93500+	6 5.33711-	2 2.94000+	6 6.67409-	2	612	3251	899
2.94500+	6 8.22825-	2 2.95000+	6 1.00121-	1 2.95500+	6 1.20124-	1	612	3251	900
2.96000+	6 1.41649-	1 2.96500+	6 1.63245-	1 2.97000+	6 1.82375-	1	612	3251	901
2.97500+	6 1.95607-	1 2.98000+	6 1.99503-	1 2.98500+	6 1.92161-	1	612	3251	902
2.99000+	6 1.74434-	1 2.99500+	6 1.49604-	1 2.99800+	6 1.33045-	1	612	3251	903
3.00000+	6 1.21834-	1 3.01000+	6 6.99115-	2 3.02000+	6 3.10465-	2	612	3251	904
3.03000+	6 4.83854-	3 3.04000+	6-1.22968-	2 3.05000+	6-2.34589-	2	612	3251	905
3.06000+	6-3.07383-	2 3.07000+	6-3.54591-	2 3.08000+	6-3.84508-	2	612	3251	906
3.09000+	6-4.02389-	2 3.10000+	6-4.11660-	2 3.15000+	6-3.87116-	2	612	3251	907
3.20000+	6-3.05878-	2 3.25000+	6-1.97762-	2 3.30000+	6-7.41534-	3	612	3251	908
3.35000+	6 5.78996-	3 3.40000+	6 1.92715-	2 3.45000+	6 3.25570-	2	612	3251	909
3.50000+	6 4.52388-	2 3.55000+	6 5.69903-	2 3.60000+	6 6.75487-	2	612	3251	910
3.65000+	6 7.67032-	2 3.70000+	6 8.42689-	2 3.75000+	6 9.00710-	2	612	3251	911
3.80000+	6 9.39135-	2 3.85000+	6 9.55506-	2 3.90000+	6 9.46694-	2	612	3251	912
3.95000+	6 9.09010-	2 4.00000+	6 8.40136-	2 4.05000+	6 7.48764-	2	612	3251	913
4.10000+	6 6.98575-	2 4.15000+	6 9.96233-	2 4.20000+	6 2.53244-	1	612	3251	914
4.22000+	6 3.51497-	1 4.24000+	6 4.36739-	1 4.26000+	6 4.86595-	1	612	3251	915
4.28000+	6 5.01514-	1 4.30000+	6 4.94601-	1 4.32000+	6 4.77893-	1	612	3251	916
4.34000+	6 4.58428-	1 4.36000+	6 4.39500-	1 4.38000+	6 4.22356-	1	612	3251	917
4.40000+	6 4.07323-	1 4.45000+	6 3.78069-	1 4.50000+	6 3.57846-	1	612	3251	918
4.55000+	6 3.43613-	1 4.60000+	6 3.33360-	1 4.65000+	6 3.25798-	1	612	3251	919
4.70000+	6 3.20113-	1 4.75000+	6 3.15708-	1 4.80000+	6 3.12086-	1	612	3251	920
4.91000+	6 3.10913-	1 4.93000+	6 2.94892-	1 5.05000+	6 2.88692-	1	612	3251	921
5.15000+	6 2.93723-	1 5.32400+	6 2.76285-	1 5.34800+	6 3.14964-	1	612	3251	922
5.36100+	6 4.21213-	1 5.37700+	6 3.93776-	1 5.47000+	6 2.77421-	1	612	3251	923
5.57000+	6 3.19807-	1 5.78000+	6 2.92499-	1 6.00000+	6 2.61228-	1	612	3251	924
6.25000+	6 2.22647-	1 6.29000+	6 2.02321-	1 6.33000+	6 3.00656-	1	612	3251	925
6.52000+	6 4.07622-	1 6.56000+	6 4.69201-	1 6.61000+	6 3.48718-	1	612	3251	926
6.94000+	6 2.52297-	1 7.20000+	6 4.06914-	1 7.35000+	6 6.34487-	1	612	3251	927
7.73000+	6 2.08716-	1 8.00000+	6 5.26851-	1 8.50000+	6 4.93143-	1	612	3251	928
9.00000+	6 4.06009-	1 9.50000+	6 4.95856-	1 1.00000+	7 5.82895-	1	612	3251	929

.....10.....20.....30.....40.....50.....60.....										MAT	MF	MT	SEQ	
1.05000+	7	5.61766-	1	1.10000+	7	6.30911-	1	1.15000+	7	5.91066-	1	612	3251	930
1.20000+	7	5.44312-	1	1.25000+	7	5.44104-	1	1.30000+	7	6.10491-	1	612	3251	931
1.35000+	7	5.98669-	1	1.40000+	7	6.31647-	1	1.45000+	7	6.16042-	1	612	3251	932
1.58500+	7	6.63336-	1	1.72700+	7	7.39651-	1	1.82500+	7	7.41239-	1	612	3251	933
2.00000+	7	7.66989-	1									612	3251	934
												612	3	0
												612	0	0
6.01200+	3	1.18969+	1									0	612	4
0.0	+ 0	1.18969+	1									81	8	612
1.00000+	0	5.60370-	2	1.41442-	3	1.61735-	8	0.0	+ 0	0.0	+ 0	0	612	4
0.0	+ 0	0.0	+ 0	0.0	+ 0	0.0	+ 0	9.95761-	1	1.00663-	1	612	4	2
4.84253-	3	1.13137-	4	7.18336-	7	2.75660-	7	0.0	+ 0	0.0	+ 0	612	4	2
0.0	+ 0	-5.56976-	2	9.88917-	1	1.43303-	1	1.00634-	2	4.11140-	4	612	4	2
1.65776-	6	-6.62063-	7	0.0	+ 0	0.0	+ 0	4.21146-	3	-9.97597-	2	612	4	2
9.78427-	1	1.84778-	1	1.70120-	2	9.64783-	4	2.21442-	5	-7.94634-	7	612	4	2
0.0	+ 0	-3.37070-	4	9.58393-	3	-1.41513-	1	9.64495-	1	2.25166-	1	612	4	2
2.56425-	2	1.84655-	3	7.23473-	5	0.0	+ 0	2.75427-	5	-8.95134-	4	612	4	2
1.65416-	2	-1.81820-	1	9.47210-	1	2.64368-	1	3.58937-	2	3.12422-	3	612	4	2
0.0	+ 0	-2.27289-	6	8.20842-	5	-1.77074-	3	2.50850-	2	-2.20763-	1	612	4	2
9.26669-	1	3.02232-	1	4.76936-	2	0.0	+ 0	1.88592-	7	-7.43055-	6	612	4	2
1.80395-	4	-3.03226-	3	3.51633-	2	-2.58254-	1	9.02978-	1	3.38586-	1	612	4	2
0.0	+ 0	-1.57008-	8	6.66232-	7	-1.77961-	5	3.40149-	4	-4.74197-	3	612	4	2
4.67054-	2	-2.94152-	1	8.76267-	1							612	4	2
0.0	+ 0	0.0	+ 0									280	612	4
		280	2									0	612	4
0.0	+ 0	1.00000-	5									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	1.00000-	4									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	1.00000-	3									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	1.00000-	2									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	2.53000-	2									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	5.00000-	2									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	7.00000-	2									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	8.00000-	2									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	1.00000-	1									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	1.00000+	0									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	5.00000+	0									1	0	612
0.0	+ 0											1	0	612
0.0	+ 0	1.00000+	1									4	0	612
2.28250-	6	1.62200-	12	5.71990-	19	-8.60020-	25						0	612
0.0	+ 0	1.00000+	2									4	0	612
2.28230-	5	1.62190-	10	5.71970-	16	-8.60070-	21						0	612
0.0	+ 0	1.00000+	3									4	0	612
2.28030-	4	1.62110-	8	5.71780-	13	-8.60580-	17						0	612
0.0	+ 0	5.00000+	3									4	0	612
1.13580-	3	4.04560-	7	7.21338-	11	-5.34460-	14						612	4

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ	
0.0	+	0	1.00000+	4		0		0		4		0	612	4	2	985
2.26000-	3	1.61280-	6	8.35460-	10	5.32470-	13					612	4	2	986	
0.0	+	0	1.50000+	4		0		0		4		0	612	4	2	987
3.37120-	3	3.61330-	6	2.81410-	9	2.71270-	12					612	4	2	988	
0.0	+	0	2.00000+	4		0		0		4		0	612	4	2	989
4.47200-	3	6.40640-	6	6.66460-	9	8.60480-	12					612	4	2	990	
0.0	+	0	2.50000+	4		0		0		4		0	612	4	2	991
5.56080-	3	9.97740-	6	1.29990-	8	2.11090-	11					612	4	2	992	
0.0	+	0	3.00000+	4		0		0		4		0	612	4	2	993
6.63980-	3	1.43320-	5	2.24410-	8	4.39250-	11					612	4	2	994	
0.0	+	0	3.50000+	4		0		0		4		0	612	4	2	995
7.70560-	3	1.94200-	5	3.54940-	8	8.20660-	11					612	4	2	996	
0.0	+	0	4.00000+	4		0		0		4		0	612	4	2	997
8.76180-	3	2.52970-	5	5.29340-	8	1.40490-	10					612	4	2	998	
0.0	+	0	5.00000+	4		0		0		4		0	612	4	2	999
1.08450-	2	3.93350-	5	1.03190-	7	3.45360-	10					612	4	2	1000	
0.0	+	0	6.00000+	4		0		0		4		0	612	4	2	1001
1.28850-	2	5.62790-	5	1.77380-	7	7.24370-	10					612	4	2	1002	
0.0	+	0	7.00000+	4		0		0		4		0	612	4	2	1003
1.48830-	2	7.61980-	5	2.81150-	7	1.35120-	9					612	4	2	1004	
0.0	+	0	8.00000+	4		0		0		4		0	612	4	2	1005
1.68400-	2	9.87200-	5	4.16040-	7	2.34200-	9					612	4	2	1006	
0.0	+	0	9.00000+	4		0		0		4		0	612	4	2	1007
1.87570-	2	1.24280-	4	5.91230-	7	3.77630-	9					612	4	2	1008	
0.0	+	0	1.00000+	5		0		0		4		0	612	4	2	1009
2.06370-	2	1.52200-	4	8.03810-	7	5.84710-	9					612	4	2	1010	
0.0	+	0	1.50000+	5		0		0		4		0	612	4	2	1011
2.94720-	2	3.29340-	4	2.60070-	6	3.17500-	8					612	4	2	1012	
0.0	+	0	2.00000+	5		0		0		4		0	612	4	2	1013
3.74350-	2	5.65980-	4	5.97260-	6	1.05580-	7					612	4	2	1014	
0.0	+	0	2.50000+	5		0		0		4		0	612	4	2	1015
4.46230-	2	8.56500-	4	1.13170-	5	2.69900-	7					612	4	2	1016	
0.0	+	0	3.00000+	5		0		0		4		0	612	4	2	1017
5.10750-	2	1.19230-	3	1.88490-	5	5.86890-	7					612	4	2	1018	
0.0	+	0	3.50000+	5		0		0		4		0	612	4	2	1019
5.68770-	2	1.56990-	3	2.87850-	5	1.13860-	6					612	4	2	1020	
0.0	+	0	4.00000+	5		0		0		4		0	612	4	2	1021
6.20460-	2	1.98230-	3	4.11600-	5	2.02990-	6					612	4	2	1022	
0.0	+	0	5.00000+	5		0		0		4		0	612	4	2	1023
7.07510-	2	2.89970-	3	7.30960-	5	5.39430-	6					612	4	2	1024	
0.0	+	0	6.00000+	5		0		0		4		0	612	4	2	1025
7.74910-	2	3.91450-	3	1.12950-	4	1.21190-	5					612	4	2	1026	
0.0	+	0	7.00000+	5		0		0		4		0	612	4	2	1027
8.24980-	2	5.00420-	3	1.56890-	4	2.42260-	5					612	4	2	1028	
0.0	+	0	8.00000+	5		0		0		4		0	612	4	2	1029
8.59630-	2	6.15600-	3	1.98750-	4	4.44410-	5					612	4	2	1030	
0.0	+	0	9.00000+	5		0		0		4		0	612	4	2	1031
8.80250-	2	7.36430-	3	2.29520-	4	7.62950-	5					612	4	2	1032	
0.0	+	0	1.00000+	6		0		0		4		0	612	4	2	1033
8.88230-	2	8.64210-	3	2.37480-	4	1.24320-	4					612	4	2	1034	
0.0	+	0	1.10000+	6		0		0		4		0	612	4	2	1035
8.84030-	2	9.99950-	3	2.05910-	4	1.93930-	4					612	4	2	1036	
0.0	+	0	1.15000+	6		0		0		4		0	612	4	2	1037
8.77650-	2	1.07200-	2	1.69180-	4	2.38860-	4					612	4	2	1038	
0.0	+	0	1.20000+	6		0		0		4		0	612	4	2	1039

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
8.68490-	2 1.14770-	2 1.14410-	4-2.91740-	4		612	4	2	1040
0.0	+ 0 1.25000+	6	0	0	4	0	612	4	2 1041
8.56490-	2 1.22730-	2 3.76360-	5-3.53470-	4		612	4	2	1042
0.0	+ 0 1.30000+	6	0	0	4	0	612	4	2 1043
8.41740-	2 1.31190-	2-6.51860-	5-4.25040-	4		612	4	2	1044
0.0	+ 0 1.35000+	6	0	0	4	0	612	4	2 1045
8.24230-	2 1.40250-	2-1.98970-	4-5.07410-	4		612	4	2	1046
0.0	+ 0 1.40000+	6	0	0	4	0	612	4	2 1047
8.03940-	2 1.50010-	2-3.69530-	4-6.01460-	4		612	4	2	1048
0.0	+ 0 1.45000+	6	0	0	4	0	612	4	2 1049
7.80750-	2 1.60570-	2-5.84360-	4-7.07740-	4		612	4	2	1050
0.0	+ 0 1.50000+	6	0	0	4	0	612	4	2 1051
7.54650-	2 1.72100-	2-8.51600-	4-8.26660-	4		612	4	2	1052
0.0	+ 0 1.55000+	6	0	0	4	0	612	4	2 1053
7.25540-	2 1.84760-	2-1.18180-	3-9.57950-	4		612	4	2	1054
0.0	+ 0 1.60000+	6	0	0	4	0	612	4	2 1055
6.93300-	2 1.98750-	2-1.58870-	3-1.10030-	3		612	4	2	1056
0.0	+ 0 1.65000+	6	0	0	4	0	612	4	2 1057
6.57720-	2 2.14270-	2-2.09030-	3-1.25040-	3		612	4	2	1058
0.0	+ 0 1.70000+	6	0	0	4	0	612	4	2 1059
6.18540-	2 2.31550-	2-2.71240-	3-1.40190-	3		612	4	2	1060
0.0	+ 0 1.75000+	6	0	0	4	0	612	4	2 1061
5.75320-	2 2.50840-	2-3.49340-	3-1.54190-	3		612	4	2	1062
0.0	+ 0 1.80000+	6	0	0	4	0	612	4	2 1063
5.27390-	2 2.72410-	2-4.49570-	3-1.64550-	3		612	4	2	1064
0.0	+ 0 1.85000+	6	0	0	4	0	612	4	2 1065
4.73510-	2 2.96530-	2-5.83120-	3-1.66080-	3		612	4	2	1066
0.0	+ 0 1.90000+	6	0	0	4	0	612	4	2 1067
4.11170-	2 3.23520-	2-7.73090-	3-1.46840-	3		612	4	2	1068
0.0	+ 0 1.95000+	6	0	0	4	0	612	4	2 1069
3.33950-	2 3.54290-	2-1.07750-	2-7.39460-	4		612	4	2	1070
0.0	+ 0 2.00000+	6	0	0	4	0	612	4	2 1071
2.19140-	2 3.95900-	2-1.69900-	2 1.81260-	3		612	4	2	1072
0.0	+ 0 2.01000+	6	0	0	4	0	612	4	2 1073
1.84990-	2 4.09220-	2-1.91980-	2 2.95290-	3		612	4	2	1074
0.0	+ 0 2.02000+	6	0	0	4	0	612	4	2 1075
1.42830-	2 4.27890-	2-2.20960-	2 4.59080-	3		612	4	2	1076
0.0	+ 0 2.03000+	6	0	0	4	0	612	4	2 1077
8.78880-	3 4.57660-	2-2.60790-	2 7.07580-	3		612	4	2	1078
0.0	+ 0 2.04000+	6	0	0	4	0	612	4	2 1079
1.08920-	3 5.13620-	2-3.18990-	2 1.11570-	2		612	4	2	1080
0.0	+ 0 2.05000+	6	0	0	4	0	612	4	2 1081
-1.08140-	2 6.43050-	2-4.10780-	2 1.87100-	2		612	4	2	1082
0.0	+ 0 2.06000+	6	0	0	4	0	612	4	2 1083
-3.13030-	2 1.04010-	1-5.63920-	2 3.54420-	2		612	4	2	1084
0.0	+ 0 2.06100+	6	0	0	4	0	612	4	2 1085
-3.40520-	2 1.11750-	1-5.83250-	2 3.81450-	2		612	4	2	1086
0.0	+ 0 2.06200+	6	0	0	4	0	612	4	2 1087
-3.69280-	2 1.20720-	1-6.02960-	2 4.11310-	2		612	4	2	1088
0.0	+ 0 2.06300+	6	0	0	4	0	612	4	2 1089
-3.99100-	2 1.31160-	1-6.22720-	2 4.44310-	2		612	4	2	1090
0.0	+ 0 2.06400+	6	0	0	4	0	612	4	2 1091
-4.29640-	2 1.43340-	1-6.42040-	2 4.80760-	2		612	4	2	1092
0.0	+ 0 2.06500+	6	0	0	4	0	612	4	2 1093
-4.60290-	2 1.57580-	1-6.60190-	2 5.20890-	2		612	4	2	1094

.....10.....	20.....	30.....	40.....	50.....	60.....		MAT	MF	MT	SEQ
0.0	+	0	2.06600+	6	0	0	0	4	0	612	4	2	1095		
-4.90140-	2	1.74230-	1-6.76100-	2	5.64850-	2	0	0	612	4	2	1096			
0.0	+	0	2.06700+	6	0	0	0	4	0	612	4	2	1097		
-5.17780-	2	1.93670-	1-6.88250-	2	6.12590-	2	0	0	612	4	2	1098			
0.0	+	0	2.06800+	6	0	0	0	4	0	612	4	2	1099		
-5.41160-	2	2.16270-	1-6.94550-	2	6.63700-	2	0	0	612	4	2	1100			
0.0	+	0	2.06900+	6	0	0	0	4	0	612	4	2	1101		
-5.57400-	2	2.42330-	1-6.92200-	2	7.17200-	2	0	0	612	4	2	1102			
0.0	+	0	2.07000+	6	0	0	0	4	0	612	4	2	1103		
-5.62620-	2	2.71970-	1-6.77590-	2	7.71270-	2	0	0	612	4	2	1104			
0.0	+	0	2.07100+	6	0	0	0	4	0	612	4	2	1105		
-5.51890-	2	3.04940-	1-6.46380-	2	8.22900-	2	0	0	612	4	2	1106			
0.0	+	0	2.07200+	6	0	0	0	4	0	612	4	2	1107		
-5.19520-	2	3.40400-	1-5.93920-	2	8.67670-	2	0	0	612	4	2	1108			
0.0	+	0	2.07300+	6	0	0	0	4	0	612	4	2	1109		
-4.59860-	2	3.76700-	1-5.16120-	2	8.99700-	2	0	0	612	4	2	1110			
0.0	+	0	2.07400+	6	0	0	0	4	0	612	4	2	1111		
-3.68860-	2	4.11250-	1-4.10900-	2	9.12310-	2	0	0	612	4	2	1112			
0.0	+	0	2.07500+	6	0	0	0	4	0	612	4	2	1113		
-2.46070-	2	4.40680-	1-2.79950-	2	8.99350-	2	0	0	612	4	2	1114			
0.0	+	0	2.07600+	6	0	0	0	4	0	612	4	2	1115		
-9.64430-	3	4.61540-	1-1.29930-	2	8.57260-	2	0	0	612	4	2	1116			
0.0	+	0	2.07700+	6	0	0	0	4	0	612	4	2	1117		
6.95170-	3	4.71180-	1 2.79470-	3	7.86870-	2	0	0	612	4	2	1118			
0.0	+	0	2.07800+	6	0	0	0	4	0	612	4	2	1119		
2.37790-	2	4.68700-	1 1.80360-	2	6.93880-	2	0	0	612	4	2	1120			
0.0	+	0	2.07900+	6	0	0	0	4	0	612	4	2	1121		
3.94590-	2	4.55170-	1 3.15440-	2	5.87370-	2	0	0	612	4	2	1122			
0.0	+	0	2.08000+	6	0	0	0	4	0	612	4	2	1123		
5.29740-	2	4.33170-	1 4.25530-	2	4.77180-	2	0	0	612	4	2	1124			
0.0	+	0	2.08100+	6	0	0	0	4	0	612	4	2	1125		
6.38210-	2	4.05870-	1 5.08040-	2	3.71520-	2	0	0	612	4	2	1126			
0.0	+	0	2.08200+	6	0	0	0	4	0	612	4	2	1127		
7.19650-	2	3.76220-	1 5.64480-	2	2.75780-	2	0	0	612	4	2	1128			
0.0	+	0	2.08300+	6	0	0	0	4	0	612	4	2	1129		
7.76760-	2	3.46460-	1 5.98730-	2	1.92520-	2	0	0	612	4	2	1130			
0.0	+	0	2.08400+	6	0	0	0	4	0	612	4	2	1131		
8.13670-	2	3.18080-	1 6.15460-	2	1.22220-	2	0	0	612	4	2	1132			
0.0	+	0	2.08500+	6	0	0	0	4	0	612	4	2	1133		
8.34730-	2	2.91900-	1 6.19150-	2	6.40470-	3	0	0	612	4	2	1134			
0.0	+	0	2.08600+	6	0	0	0	4	0	612	4	2	1135		
8.43870-	2	2.68250-	1 6.13570-	2	1.65620-	3	0	0	612	4	2	1136			
0.0	+	0	2.08700+	6	0	0	0	4	0	612	4	2	1137		
8.44330-	2	2.47190-	1 6.01700-	2-2.18530-	3	0	0	0	612	4	2	1138			
0.0	+	0	2.08800+	6	0	0	0	4	0	612	4	2	1139		
8.38660-	2	2.28570-	1 5.85790-	2-5.27520-	3	0	0	0	612	4	2	1140			
0.0	+	0	2.08900+	6	0	0	0	4	0	612	4	2	1141		
8.28770-	2	2.12190-	1 5.67430-	2-7.75140-	3	0	0	0	612	4	2	1142			
0.0	+	0	2.09000+	6	0	0	0	4	0	612	4	2	1143		
8.16080-	2	1.97800-	1 5.47770-	2-9.73100-	3	0	0	0	612	4	2	1144			
0.0	+	0	2.09100+	6	0	0	0	4	0	612	4	2	1145		
8.01630-	2	1.85150-	1 5.27600-	2-1.13100-	2	0	0	0	612	4	2	1146			
0.0	+	0	2.09200+	6	0	0	0	4	0	612	4	2	1147		
7.86150-	2	1.74030-	1 5.07450-	2-1.25680-	2	0	0	0	612	4	2	1148			
0.0	+	0	2.09300+	6	0	0	0	4	0	612	4	2	1149		

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
7.70180-	2	1.64220-	1	4.87660-	2	-1.35670-	2					612	4	2	1150
0.0	+	0 2.09400+	6			0	0	4		0		612	4	2	1151
7.54070-	2	1.55560-	1	4.68470-	2	-1.43570-	2					612	4	2	1152
0.0	+	0 2.09500+	6			0	0	4		0		612	4	2	1153
7.38080-	2	1.47880-	1	4.50000-	2	-1.49800-	2					612	4	2	1154
0.0	+	0 2.09600+	6			0	0	4		0		612	4	2	1155
7.22380-	2	1.41060-	1	4.32330-	2	-1.54680-	2					612	4	2	1156
0.0	+	0 2.09700+	6			0	0	4		0		612	4	2	1157
7.07080-	2	1.34970-	1	4.15480-	2	-1.58460-	2					612	4	2	1158
0.0	+	0 2.09800+	6			0	0	4		0		612	4	2	1159
6.92240-	2	1.29530-	1	3.99470-	2	-1.61350-	2					612	4	2	1160
0.0	+	0 2.09900+	6			0	0	4		0		612	4	2	1161
6.77910-	2	1.24650-	1	3.84260-	2	-1.63520-	2					612	4	2	1162
0.0	+	0 2.10000+	6			0	0	4		0		612	4	2	1163
6.64120-	2	1.20250-	1	3.69840-	2	-1.65110-	2					612	4	2	1164
0.0	+	0 2.11000+	6			0	0	4		0		612	4	2	1165
5.52960-	2	9.33090-	2	2.60690-	2	-1.65010-	2					612	4	2	1166
0.0	+	0 2.12000+	6			0	0	4		0		612	4	2	1167
4.77180-	2	8.14530-	2	1.93200-	2	-1.56850-	2					612	4	2	1168
0.0	+	0 2.13000+	6			0	0	4		0		612	4	2	1169
4.21710-	2	7.54780-	2	1.47920-	2	-1.49050-	2					612	4	2	1170
0.0	+	0 2.14000+	6			0	0	4		0		612	4	2	1171
3.78290-	2	7.22800-	2	1.15390-	2	-1.42790-	2					612	4	2	1172
0.0	+	0 2.15000+	6			0	0	4		0		612	4	2	1173
3.42430-	2	7.05820-	2	9.07410-	3	-1.37980-	2					612	4	2	1174
0.0	+	0 2.16000+	6			0	0	4		0		612	4	2	1175
3.11590-	2	6.97790-	2	7.12580-	3	-1.34370-	2					612	4	2	1176
0.0	+	0 2.17000+	6			0	0	4		0		612	4	2	1177
2.84200-	2	6.95540-	2	5.53340-	3	-1.31700-	2					612	4	2	1178
0.0	+	0 2.18000+	6			0	0	4		0		612	4	2	1179
2.59280-	2	6.97260-	2	4.19550-	3	-1.29790-	2					612	4	2	1180
0.0	+	0 2.19000+	6			0	0	4		0		612	4	2	1181
2.36170-	2	7.01840-	2	3.04500-	3	-1.28490-	2					612	4	2	1182
0.0	+	0 2.20000+	6			0	0	4		0		612	4	2	1183
2.14430-	2	7.08620-	2	2.03620-	3	-1.27680-	2					612	4	2	1184
0.0	+	0 2.25000+	6			0	0	4		0		612	4	2	1185
1.17320-	2	7.63390-	2	-1.75860-	3	-1.28610-	2					612	4	2	1186
0.0	+	0 2.30000+	6			0	0	4		0		612	4	2	1187
2.89070-	3	8.40600-	2	-4.54770-	3	-1.34550-	2					612	4	2	1188
0.0	+	0 2.35000+	6			0	0	4		0		612	4	2	1189
-5.66740-	3	9.34950-	2	-6.94310-	3	-1.43420-	2					612	4	2	1190
0.0	+	0 2.40000+	6			0	0	4		0		612	4	2	1191
-1.41240-	2	1.04580-	1	-9.17230-	3	-1.54310-	2					612	4	2	1192
0.0	+	0 2.45000+	6			0	0	4		0		612	4	2	1193
-2.25290-	2	1.17400-	1	-1.13370-	2	-1.66660-	2					612	4	2	1194
0.0	+	0 2.50000+	6			0	0	4		0		612	4	2	1195
-3.07900-	2	1.32110-	1	-1.34590-	2	-1.80110-	2					612	4	2	1196
0.0	+	0 2.55000+	6			0	0	4		0		612	4	2	1197
-3.87590-	2	1.48910-	1	-1.55230-	2	-1.94230-	2					612	4	2	1198
0.0	+	0 2.60000+	6			0	0	4		0		612	4	2	1199
-4.61980-	2	1.68010-	1	-1.74790-	2	-2.08530-	2					612	4	2	1200
0.0	+	0 2.65000+	6			0	0	4		0		612	4	2	1201
-5.27330-	2	1.89690-	1	-1.92220-	2	-2.22320-	2					612	4	2	1202
0.0	+	0 2.70000+	6			0	0	4		0		612	4	2	1203
-5.77310-	2	2.14270-	1	-2.05500-	2	-2.34710-	2					612	4	2	1204

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ	
0.0	+ 0	2.72000+	6			0		0		4		0	612	4	2	1205
-5.90430-	2	2.25000-	1	-2.08770-	2	-2.39050-	2						612	4	2	1206
0.0	+ 0	2.74000+	6			0		0		4		0	612	4	2	1207
-5.97410-	2	2.36280-	1	-2.10080-	2	-2.42990-	2						612	4	2	1208
0.0	+ 0	2.76000+	6			0		0		4		0	612	4	2	1209
-5.94830-	2	2.48090-	1	-2.08130-	2	-2.46700-	2						612	4	2	1210
0.0	+ 0	2.78000+	6			0		0		4		0	612	4	2	1211
-5.73110-	2	2.60270-	1	-1.99190-	2	-2.51150-	2						612	4	2	1212
0.0	+ 0	2.80000+	6			0		0		4		0	612	4	2	1213
-4.76740-	2	2.71230-	1	-1.60620-	2	-2.63560-	2						612	4	2	1214
0.0	+ 0	2.80100+	6			0		0		4		0	612	4	2	1215
-4.64670-	2	2.71590-	1	-1.55680-	2	-2.65080-	2						612	4	2	1216
0.0	+ 0	2.80200+	6			0		0		4		0	612	4	2	1217
-4.50750-	2	2.71890-	1	-1.49950-	2	-2.66830-	2						612	4	2	1218
0.0	+ 0	2.80300+	6			0		0		4		0	612	4	2	1219
-4.34530-	2	2.72130-	1	-1.43210-	2	-2.68850-	2						612	4	2	1220
0.0	+ 0	2.80400+	6			0		0		4		0	612	4	2	1221
-4.15350-	2	2.72280-	1	-1.35200-	2	-2.71220-	2						612	4	2	1222
0.0	+ 0	2.80500+	6			0		0		4		0	612	4	2	1223
-3.92340-	2	2.72320-	1	-1.25480-	2	-2.74040-	2						612	4	2	1224
0.0	+ 0	2.80600+	6			0		0		4		0	612	4	2	1225
-3.64180-	2	2.72210-	1	-1.13470-	2	-2.77430-	2						612	4	2	1226
0.0	+ 0	2.80700+	6			0		0		4		0	612	4	2	1227
-3.28930-	2	2.71890-	1	-9.82180-	3	-2.81580-	2						612	4	2	1228
0.0	+ 0	2.80800+	6			0		0		4		0	612	4	2	1229
-2.83470-	2	2.71280-	1	-7.82340-	3	-2.86760-	2						612	4	2	1230
0.0	+ 0	2.80900+	6			0		0		4		0	612	4	2	1231
-2.22610-	2	2.70230-	1	-5.09310-	3	-2.93360-	2						612	4	2	1232
0.0	+ 0	2.81000+	6			0		0		4		0	612	4	2	1233
-1.36960-	2	2.68470-	1	-1.14750-	3	-3.01970-	2						612	4	2	1234
0.0	+ 0	2.81100+	6			0		0		4		0	612	4	2	1235
-7.73510-	4	2.65520-	1	5.02260-	3	-3.13470-	2						612	4	2	1236
0.0	+ 0	2.81200+	6			0		0		4		0	612	4	2	1237
2.08190-	2	2.60260-	1	1.58840-	2	-3.28700-	2						612	4	2	1238
0.0	+ 0	2.81300+	6			0		0		4		0	612	4	2	1239
6.31470-	2	2.49900-	1	3.90620-	2	-3.44540-	2						612	4	2	1240
0.0	+ 0	2.81400+	6			0		0		4		0	612	4	2	1241
1.67880-	1	2.27160-	1	1.07620-	1	-2.99070-	2						612	4	2	1242
0.0	+ 0	2.81500+	6			0		0		4		0	612	4	2	1243
1.71830-	1	2.66570-	1	2.19890-	1	5.36620-	2						612	4	2	1244
0.0	+ 0	2.81600+	6			0		0		4		0	612	4	2	1245
-1.65570-	1	3.37130-	1	-1.77070-	2	2.64590-	2						612	4	2	1246
0.0	+ 0	2.81700+	6			0		0		4		0	612	4	2	1247
-1.48210-	1	3.21610-	1	-4.08030-	2	1.05660-	3						612	4	2	1248
0.0	+ 0	2.81800+	6			0		0		4		0	612	4	2	1249
-1.27190-	1	3.12970-	1	-4.01270-	2	-7.93980-	3						612	4	2	1250
0.0	+ 0	2.81900+	6			0		0		4		0	612	4	2	1251
-1.13540-	1	3.08370-	1	-3.76880-	2	-1.22410-	2						612	4	2	1252
0.0	+ 0	2.82000+	6			0		0		4		0	612	4	2	1253
-1.04380-	1	3.05750-	1	-3.55150-	2	-1.47080-	2						612	4	2	1254
0.0	+ 0	2.82100+	6			0		0		4		0	612	4	2	1255
-9.78620-	2	3.04190-	1	-3.37620-	2	-1.62900-	2						612	4	2	1256
0.0	+ 0	2.82200+	6			0		0		4		0	612	4	2	1257
-9.29990-	2	3.03270-	1	-3.23570-	2	-1.73820-	2						612	4	2	1258
0.0	+ 0	2.82300+	6			0		0		4		0	612	4	2	1259

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
-8.92290-	2	3.02770-	1	-3.12160-	2	-1.81770-	2					612	4	2	1260
0.0	+	0 2.82400+	6	0	0	0	0	4	0	612	4	2	1261		
-8.62160-	2	3.02550-	1	-3.02730-	2	-1.87770-	2					612	4	2	1262
0.0	+	0 2.82500+	6	0	0	0	0	4	0	612	4	2	1263		
-8.37450-	2	3.02520-	1	-2.94810-	2	-1.92440-	2					612	4	2	1264
0.0	+	0 2.82600+	6	0	0	0	0	4	0	612	4	2	1265		
-8.16770-	2	3.02650-	1	-2.88060-	2	-1.96140-	2					612	4	2	1266
0.0	+	0 2.82700+	6	0	0	0	0	4	0	612	4	2	1267		
-7.99140-	2	3.02890-	1	-2.82230-	2	-1.99140-	2					612	4	2	1268
0.0	+	0 2.82800+	6	0	0	0	0	4	0	612	4	2	1269		
-7.83880-	2	3.03210-	1	-2.77120-	2	-2.01590-	2					612	4	2	1270
0.0	+	0 2.82900+	6	0	0	0	0	4	0	612	4	2	1271		
-7.70500-	2	3.03610-	1	-2.72590-	2	-2.03620-	2					612	4	2	1272
0.0	+	0 2.83000+	6	0	0	0	0	4	0	612	4	2	1273		
-7.58630-	2	3.04060-	1	-2.68550-	2	-2.05310-	2					612	4	2	1274
0.0	+	0 2.83200+	6	0	0	0	0	4	0	612	4	2	1275		
-7.38330-	2	3.05100-	1	-2.61570-	2	-2.07910-	2					612	4	2	1276
0.0	+	0 2.83400+	6	0	0	0	0	4	0	612	4	2	1277		
-7.21420-	2	3.06270-	1	-2.55710-	2	-2.09740-	2					612	4	2	1278
0.0	+	0 2.83600+	6	0	0	0	0	4	0	612	4	2	1279		
-7.06880-	2	3.07550-	1	-2.50640-	2	-2.11010-	2					612	4	2	1280
0.0	+	0 2.83800+	6	0	0	0	0	4	0	612	4	2	1281		
-6.94060-	2	3.08900-	1	-2.46160-	2	-2.11870-	2					612	4	2	1282
0.0	+	0 2.84000+	6	0	0	0	0	4	0	612	4	2	1283		
-6.82500-	2	3.10320-	1	-2.42110-	2	-2.12390-	2					612	4	2	1284
0.0	+	0 2.84500+	6	0	0	0	0	4	0	612	4	2	1285		
-6.57180-	2	3.14070-	1	-2.33220-	2	-2.12610-	2					612	4	2	1286
0.0	+	0 2.85000+	6	0	0	0	0	4	0	612	4	2	1287		
-6.34690-	2	3.18060-	1	-2.25330-	2	-2.11670-	2					612	4	2	1288
0.0	+	0 2.86000+	6	0	0	0	0	4	0	612	4	2	1289		
-5.91890-	2	3.26580-	1	-2.10340-	2	-2.07230-	2					612	4	2	1290
0.0	+	0 2.87000+	6	0	0	0	0	4	0	612	4	2	1291		
-5.46300-	2	3.35670-	1	-1.94340-	2	-1.99790-	2					612	4	2	1292
0.0	+	0 2.88000+	6	0	0	0	0	4	0	612	4	2	1293		
-4.93260-	2	3.45270-	1	-1.75580-	2	-1.89170-	2					612	4	2	1294
0.0	+	0 2.89000+	6	0	0	0	0	4	0	612	4	2	1295		
-4.28470-	2	3.55270-	1	-1.52410-	2	-1.74730-	2					612	4	2	1296
0.0	+	0 2.90000+	6	0	0	0	0	4	0	612	4	2	1297		
-3.46840-	2	3.65500-	1	-1.22760-	2	-1.55340-	2					612	4	2	1298
0.0	+	0 2.91000+	6	0	0	0	0	4	0	612	4	2	1299		
-2.41520-	2	3.75590-	1	-8.37850-	3	-1.29260-	2					612	4	2	1300
0.0	+	0 2.92000+	6	0	0	0	0	4	0	612	4	2	1301		
-1.02940-	2	3.84740-	1	-3.13570-	3	-9.39290-	3					612	4	2	1302
0.0	+	0 2.93000+	6	0	0	0	0	4	0	612	4	2	1303		
8.22570-	3	3.91270-	1	4.05510-	3	-4.56050-	3					612	4	2	1304
0.0	+	0 2.93500+	6	0	0	0	0	4	0	612	4	2	1305		
1.97580-	2	3.92590-	1	8.63320-	3	-1.50520-	3					612	4	2	1306
0.0	+	0 2.94000+	6	0	0	0	0	4	0	612	4	2	1307		
3.31080-	2	3.91740-	1	1.40260-	2	2.06740-	3					612	4	2	1308
0.0	+	0 2.94500+	6	0	0	0	0	4	0	612	4	2	1309		
4.84590-	2	3.87750-	1	2.03520-	2	6.21840-	3					612	4	2	1310
0.0	+	0 2.95000+	6	0	0	0	0	4	0	612	4	2	1311		
6.58640-	2	3.79330-	1	2.76930-	2	1.09780-	2					612	4	2	1312
0.0	+	0 2.95500+	6	0	0	0	0	4	0	612	4	2	1313		
8.50970-	2	3.64830-	1	3.60400-	2	1.63070-	2					612	4	2	1314

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
0.0	+ 0 2.96000+ 6	0	0	4	0	612	4	2	1315
1.05410-	1 3.42400- 1	4.51880-	2 2.20250-	2	0	612	4	2	1316
0.0	+ 0 2.96500+ 6	0	0	4	0	612	4	2	1317
1.25250-	1 3.10400- 1	5.46030-	2 2.77370-	2	0	612	4	2	1318
0.0	+ 0 2.97000+ 6	0	0	4	0	612	4	2	1319
1.42040-	1 2.68290- 1	6.33040-	2 3.27570-	2	0	612	4	2	1320
0.0	+ 0 2.97500+ 6	0	0	4	0	612	4	2	1321
1.52430-	1 2.17790- 1	6.98930-	2 3.61640-	2	0	612	4	2	1322
0.0	+ 0 2.98000+ 6	0	0	4	0	612	4	2	1323
1.53240-	1 1.63680- 1	7.28910-	2 3.70420-	2	0	612	4	2	1324
0.0	+ 0 2.98500+ 6	0	0	4	0	612	4	2	1325
1.42970-	1 1.13090- 1	7.13760-	2 3.49010-	2	0	612	4	2	1326
0.0	+ 0 2.99000+ 6	0	0	4	0	612	4	2	1327
1.22880-	1 7.29620- 2	6.55070-	2 2.99930-	2	0	612	4	2	1328
0.0	+ 0 2.99500+ 6	0	0	4	0	612	4	2	1329
9.64980-	2 4.72400- 2	5.64840-	2 2.32160-	2	0	612	4	2	1330
0.0	+ 0 2.99800+ 6	0	0	4	0	612	4	2	1331
7.94140-	2 3.88760- 2	5.02390-	2 1.87250-	2	0	612	4	2	1332
0.0	+ 0 3.00000+ 6	0	0	4	0	612	4	2	1333
6.80070-	2 3.59670- 2	4.59410-	2 1.56930-	2	0	612	4	2	1334
0.0	+ 0 3.01000+ 6	0	0	4	0	612	4	2	1335
1.64890-	2 4.50390- 2	2.54890-	2 1.71990-	3	0	612	4	2	1336
0.0	+ 0 3.02000+ 6	0	0	4	0	612	4	2	1337
-2.07770-	2 7.44020- 2	9.65280-	3-8.67650-	3	0	612	4	2	1338
0.0	+ 0 3.03000+ 6	0	0	4	0	612	4	2	1339
-4.51330-	2 1.07750- 1	-1.31430-	3-1.56530-	2	0	612	4	2	1340
0.0	+ 0 3.04000+ 6	0	0	4	0	612	4	2	1341
-6.05350-	2 1.38760- 1	-8.66310-	3-2.01930-	2	0	612	4	2	1342
0.0	+ 0 3.05000+ 6	0	0	4	0	612	4	2	1343
-7.01780-	2 1.65840- 1	-1.35710-	2-2.31350-	2	0	612	4	2	1344
0.0	+ 0 3.06000+ 6	0	0	4	0	612	4	2	1345
-7.61510-	2 1.89080- 1	-1.68610-	2-2.50420-	2	0	612	4	2	1346
0.0	+ 0 3.07000+ 6	0	0	4	0	612	4	2	1347
-7.97470-	2 2.09030- 1	-1.90680-	2-2.62670-	2	0	612	4	2	1348
0.0	+ 0 3.08000+ 6	0	0	4	0	612	4	2	1349
-8.17640-	2 2.26290- 1	-2.05320-	2-2.70320-	2	0	612	4	2	1350
0.0	+ 0 3.09000+ 6	0	0	4	0	612	4	2	1351
-8.26990-	2 2.41360- 1	-2.14730-	2-2.74760-	2	0	612	4	2	1352
0.0	+ 0 3.10000+ 6	0	0	4	0	612	4	2	1353
-8.28720-	2 2.54650- 1	-2.20330-	2-2.76900-	2	0	612	4	2	1354
0.0	+ 0 3.15000+ 6	0	0	4	0	612	4	2	1355
-7.76360-	2 3.03430- 1	-2.16610-	2-2.68450-	2	0	612	4	2	1356
0.0	+ 0 3.20000+ 6	0	0	4	0	612	4	2	1357
-6.76960-	2 3.34950- 1	-1.86860-	2-2.43990-	2	0	612	4	2	1358
0.0	+ 0 3.25000+ 6	0	0	4	0	612	4	2	1359
-5.56300-	2 3.56490- 1	-1.44200-	2-2.10950-	2	0	612	4	2	1360
0.0	+ 0 3.30000+ 6	0	0	4	0	612	4	2	1361
-4.24160-	2 3.70940- 1	-9.33420-	3-1.71960-	2	0	612	4	2	1362
0.0	+ 0 3.35000+ 6	0	0	4	0	612	4	2	1363
-2.86820-	2 3.79790- 1	-3.69700-	3-1.28600-	2	0	612	4	2	1364
0.0	+ 0 3.40000+ 6	0	0	4	0	612	4	2	1365
-1.49370-	2 3.84020- 1	2.28960-	3-8.21410-	3	0	612	4	2	1366
0.0	+ 0 3.45000+ 6	0	0	4	0	612	4	2	1367
-1.60720-	3 3.84410- 1	8.45890-	3-3.36860-	3	0	612	4	2	1368
0.0	+ 0 3.50000+ 6	0	0	4	0	612	4	2	1369

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
1.09410-	2 3.81650-	1 1.46680-	2 1.57710-	3					612 4 2 1370
0.0	+ 0 3.55000+	6	0	0	4	0	612	4	2 1371
2.24160-	2 3.76360-	1 2.07980-	2 6.54340-	3					612 4 2 1372
0.0	+ 0 3.60000+	6	0	0	4	0	612	4	2 1373
3.25860-	2 3.69110-	1 2.67550-	2 1.14690-	2					612 4 2 1374
0.0	+ 0 3.65000+	6	0	0	4	0	612	4	2 1375
4.12650-	2 3.60360-	1 3.24640-	2 1.63090-	2					612 4 2 1376
0.0	+ 0 3.70000+	6	0	0	4	0	612	4	2 1377
4.82910-	2 3.50540-	1 3.78640-	2 2.10370-	2					612 4 2 1378
0.0	+ 0 3.75000+	6	0	0	4	0	612	4	2 1379
5.35060-	2 3.39950-	1 4.29000-	2 2.56380-	2					612 4 2 1380
0.0	+ 0 3.80000+	6	0	0	4	0	612	4	2 1381
5.67250-	2 3.28820-	1 4.75140-	2 3.01100-	2					612 4 2 1382
0.0	+ 0 3.85000+	6	0	0	4	0	612	4	2 1383
5.77100-	2 3.17300-	1 5.16310-	2 3.44600-	2					612 4 2 1384
0.0	+ 0 3.90000+	6	0	0	4	0	612	4	2 1385
5.61470-	2 3.05380-	1 5.51290-	2 3.87030-	2					612 4 2 1386
0.0	+ 0 3.95000+	6	0	0	4	0	612	4	2 1387
5.16570-	2 2.92900-	1 5.77950-	2 4.28530-	2					612 4 2 1388
0.0	+ 0 4.00000+	6	0	0	4	0	612	4	2 1389
4.39780-	2 2.79310-	1 5.92230-	2 4.69130-	2					612 4 2 1390
0.0	+ 0 4.05000+	6	0	0	4	0	612	4	2 1391
3.39110-	2 2.63290-	1 5.85910-	2 5.08120-	2					612 4 2 1392
0.0	+ 0 4.10000+	6	0	0	4	0	612	4	2 1393
2.76770-	2 2.41660-	1 5.42240-	2 5.41850-	2					612 4 2 1394
0.0	+ 0 4.15000+	6	0	0	4	0	612	4	2 1395
5.56990-	2 2.07640-	1 4.36490-	2 5.55140-	2					612 4 2 1396
0.0	+ 0 4.20000+	6	0	0	4	0	612	4	2 1397
2.07440-	1 1.61710-	1 3.25700-	2 5.10350-	2					612 4 2 1398
0.0	+ 0 4.22000+	6	0	0	4	0	612	4	2 1399
3.05470-	1 1.50760-	1 3.50050-	2 4.78940-	2					612 4 2 1400
0.0	+ 0 4.24000+	6	0	0	4	0	612	4	2 1401
3.90990-	1 1.50610-	1 4.34850-	2 4.56530-	2					612 4 2 1402
0.0	+ 0 4.26000+	6	0	0	4	0	612	4	2 1403
4.41440-	1 1.59040-	1 5.52540-	2 4.51890-	2					612 4 2 1404
0.0	+ 0 4.28000+	6	0	0	4	0	612	4	2 1405
4.57010-	1 1.70540-	1 6.68030-	2 4.62970-	2					612 4 2 1406
0.0	+ 0 4.30000+	6	0	0	4	0	612	4	2 1407
4.50630-	1 1.81070-	1 7.63510-	2 4.82830-	2					612 4 2 1408
0.0	+ 0 4.32000+	6	0	0	4	0	612	4	2 1409
4.34290-	1 1.89160-	1 8.36940-	2 5.05890-	2					612 4 2 1410
0.0	+ 0 4.34000+	6	0	0	4	0	612	4	2 1411
4.15050-	1 1.94820-	1 8.92530-	2 5.29160-	2					612 4 2 1412
0.0	+ 0 4.36000+	6	0	0	4	0	612	4	2 1413
3.96240-	1 1.98490-	1 9.35190-	2 5.51380-	2					612 4 2 1414
0.0	+ 0 4.38000+	6	0	0	4	0	612	4	2 1415
3.79140-	1 2.00680-	1 9.68850-	2 5.72210-	2					612 4 2 1416
0.0	+ 0 4.40000+	6	0	0	4	0	612	4	2 1417
3.64100-	1 2.01770-	1 9.96280-	2 5.91650-	2					612 4 2 1418
0.0	+ 0 4.45000+	6	0	0	4	0	612	4	2 1419
3.34700-	1 2.01530-	1 1.04840-	1 6.35170-	2					612 4 2 1420
0.0	+ 0 4.50000+	6	0	0	4	0	612	4	2 1421
3.14240-	1 1.98970-	1 1.08790-	1 6.73390-	2					612 4 2 1422
0.0	+ 0 4.55000+	6	0	0	4	0	612	4	2 1423
2.99740-	1 1.95360-	1 1.12100-	1 7.08120-	2					612 4 2 1424

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
0.0	+ 0 4.60000+ 6	0	0	4	0	612	4	2	1425	
2.89210-	1 1.91260- 1	1.15010- 1	7.40490- 2			612	4	2	1426	
0.0	+ 0 4.65000+ 6	0	0	4	0	612	4	2	1427	
2.81370-	1 1.86950- 1	1.17610- 1	7.71200- 2			612	4	2	1428	
0.0	+ 0 4.70000+ 6	0	0	4	0	612	4	2	1429	
2.75410-	1 1.82510- 1	1.19870- 1	8.00750- 2			612	4	2	1430	
0.0	+ 0 4.75000+ 6	0	0	4	0	612	4	2	1431	
2.70730-	1 1.77940- 1	1.21650- 1	8.29500- 2			612	4	2	1432	
0.0	+ 0 4.80000+ 6	0	0	4	0	612	4	2	1433	
2.66820-	1 1.72990- 1	1.22540- 1	8.57760- 2			612	4	2	1434	
0.0	+ 0 4.91000+ 6	0	0	5	0	612	4	2	1435	
2.64145-	1 1.45102- 1	9.68546- 2	4.31081- 2	-1.28736- 2		612	4	2	1436	
0.0	+ 0 4.93000+ 6	0	0	4	0	612	4	2	1437	
2.47423-	1 1.39644- 1	1.11795- 1	4.30074- 2			612	4	2	1438	
0.0	+ 0 5.05000+ 6	0	0	5	0	612	4	2	1439	
2.40858-	1 1.28270- 1	9.25256- 2	2.98875- 2	-1.54392- 2		612	4	2	1440	
0.0	+ 0 5.15000+ 6	0	0	5	0	612	4	2	1441	
2.46143-	1 1.34769- 1	1.04721- 1	3.60005- 2	-1.00793- 2		612	4	2	1442	
0.0	+ 0 5.32400+ 6	0	0	6	0	612	4	2	1443	
2.27209-	1 9.76157- 2	3.32599- 2	5.20492- 2	-1.27502- 2	1.40252-	2	612	4	2	1444
0.0	+ 0 5.34800+ 6	0	0	5	0	612	4	2	1445	
2.66357-	1 1.04530- 1	2.70450- 2	4.98129- 2	-1.17200- 2		612	4	2	1446	
0.0	+ 0 5.36100+ 6	0	0	5	0	612	4	2	1447	
3.76812-	1 1.78882- 1	8.55622- 2	3.66755- 2	-7.25982- 3		612	4	2	1448	
0.0	+ 0 5.37700+ 6	0	0	5	0	612	4	2	1449	
3.49757-	1 1.94161- 1	1.30996- 1	2.53447- 2	-1.12807- 2		612	4	2	1450	
0.0	+ 0 5.47000+ 6	0	0	5	0	612	4	2	1451	
2.30769-	1 1.55172- 1	1.38878- 1	2.63778- 2	-1.94116- 2		612	4	2	1452	
0.0	+ 0 5.57000+ 6	0	0	5	0	612	4	2	1453	
2.74333-	1 1.76099- 1	1.42857- 1	2.21721- 2	-1.24014- 2		612	4	2	1454	
0.0	+ 0 5.78000+ 6	0	0	5	0	612	4	2	1455	
2.47037-	1 1.76671- 1	1.43264- 1	2.24435- 2	-1.66818- 2		612	4	2	1456	
0.0	+ 0 6.00000+ 6	0	0	5	0	612	4	2	1457	
2.15184-	1 1.68627- 1	1.41133- 1	1.80995- 2	-1.79624- 2		612	4	2	1458	
0.0	+ 0 6.25000+ 6	0	0	6	0	612	4	2	1459	
1.77778-	1 1.98065- 1	2.42089- 1	4.56392- 2	-8.69990- 3	2.68817-	2	612	4	2	1460
0.0	+ 0 6.29000+ 6	0	0	7	0	612	4	2	1461	
1.58547-	1 2.09487- 1	2.42308- 1	1.48789- 1	4.96503- 2	4.02367-	2	612	4	2	1462
6.66667-	3					612	4	2	1463	
0.0	+ 0 6.33000+ 6	0	0	7	0	612	4	2	1464	
2.61106-	1 2.69304- 1	1.90026- 1	1.60887- 1	6.07363- 2	9.72287-	3	612	4	2	1465
-1.15219-	2					612	4	2	1466	
0.0	+ 0 6.52000+ 6	0	0	5	0	612	4	2	1467	
3.68782-	1 2.85077- 1	1.64666- 1	1.06537- 1	2.10510- 2		612	4	2	1468	
0.0	+ 0 6.56000+ 6	0	0	5	0	612	4	2	1469	
4.31585-	1 3.05967- 1	2.06148- 1	1.31204- 1	3.17278- 2		612	4	2	1470	
0.0	+ 0 6.61000+ 6	0	0	5	0	612	4	2	1471	
3.02454-	1 1.61520- 1	1.86630- 1	1.27474- 1	3.13107- 2		612	4	2	1472	
0.0	+ 0 6.94000+ 6	0	0	5	0	612	4	2	1473	
2.00828-	1 7.12215- 2	1.16238- 1	3.84173- 2	-1.24224- 2		612	4	2	1474	
0.0	+ 0 7.20000+ 6	0	0	4	0	612	4	2	1475	
3.58477-	1 1.07759- 1	3.84852- 2	1.46073- 2			612	4	2	1476	
0.0	+ 0 7.35000+ 6	0	0	6	0	612	4	2	1477	
5.99104-	1 3.32782- 1	1.18186- 1	2.57383- 2	1.43838- 2	3.42057-	3	612	4	2	1478
0.0	+ 0 7.73000+ 6	0	0	6	0	612	4	2	1479	

.....10.....	.....20.....	.....30.....	.....40.....	.....50.....	.....60.....	MAT	MF	MT	SEQ
1.76625- 1	4.23428- 1	2.14847- 1	1.23428- 1	6.68954- 2	1.36672- 2	612	4	2	1480
0.0 + 0	8.00000+ 6	0	0	6	0	612	4	2	1481
4.99912- 1	5.01157- 1	2.36655- 1	9.89440- 2	2.31138- 2	-1.19708- 2	612	4	2	1482
0.0 + 0	8.50000+ 6	0	0	6	0	612	4	2	1483
4.58015- 1	3.57853- 1	2.97528- 1	1.05861- 1	3.82210- 3	-1.41658- 3	612	4	2	1484
0.0 + 0	9.00000+ 6	0	0	6	0	612	4	2	1485
3.67812- 1	3.14697- 1	3.00722- 1	8.12696- 2	1.19053- 2	1.08348- 2	612	4	2	1486
0.0 + 0	9.50000+ 6	0	0	6	0	612	4	2	1487
4.61509- 1	3.77765- 1	3.15023- 1	1.38597- 1	4.44908- 2	4.51106- 3	612	4	2	1488
0.0 + 0	1.00000+ 7	0	0	6	0	612	4	2	1489
5.51703- 1	4.21924- 1	3.30750- 1	1.49246- 1	2.84557- 2	5.72191- 3	612	4	2	1490
0.0 + 0	1.05000+ 7	0	0	7	0	612	4	2	1491
5.30685- 1	4.27527- 1	3.28384- 1	1.32691- 1	3.91338- 2	3.45322- 2	612	4	2	1492
8.86834- 3	0	0	0	7	0	612	4	2	1493
0.0 + 0	1.10000+ 7	0	0	7	0	612	4	2	1494
6.01793- 1	4.58370- 1	3.23495- 1	1.31907- 1	3.64609- 2	1.01343- 2	612	4	2	1495
7.23816- 4	0	0	0	7	0	612	4	2	1496
0.0 + 0	1.15000+ 7	0	0	7	0	612	4	2	1497
5.61427- 1	4.43171- 1	3.12840- 1	1.41746- 1	3.25150- 2	2.19895- 2	612	4	2	1498
2.88600- 4	0	0	0	7	0	612	4	2	1499
0.0 + 0	1.20000+ 7	0	0	7	0	612	4	2	1500
5.10461- 1	3.72719- 1	2.88098- 1	1.17847- 1	2.56221- 2	9.52706- 3	612	4	2	1501
-2.91896- 3	0	0	0	7	0	612	4	2	1502
0.0 + 0	1.25000+ 7	0	0	7	0	612	4	2	1503
5.12105- 1	4.03356- 1	3.19107- 1	1.60089- 1	4.59262- 2	1.57978- 2	612	4	2	1504
-4.07893- 3	0	0	0	7	0	612	4	2	1505
0.0 + 0	1.30000+ 7	0	0	7	0	612	4	2	1506
5.81287- 1	4.56457- 1	3.48336- 1	1.82762- 1	7.11226- 2	2.77781- 2	612	4	2	1507
5.18469- 3	0	0	0	7	0	612	4	2	1508
0.0 + 0	1.35000+ 7	0	0	7	0	612	4	2	1509
5.68561- 1	4.38894- 1	3.36402- 1	1.83065- 1	5.45121- 2	2.36269- 2	612	4	2	1510
6.30847- 3	0	0	0	7	0	612	4	2	1511
0.0 + 0	1.40000+ 7	0	0	7	0	612	4	2	1512
6.02570- 1	4.53274- 1	3.35715- 1	1.89280- 1	5.85109- 2	2.96075- 2	612	4	2	1513
5.74584- 3	0	0	0	7	0	612	4	2	1514
0.0 + 0	1.45000+ 7	0	0	7	0	612	4	2	1515
5.87867- 1	4.67673- 1	3.17054- 1	2.05082- 1	7.85603- 2	3.55590- 2	612	4	2	1516
7.83901- 3	0	0	0	7	0	612	4	2	1517
0.0 + 0	1.58500+ 7	0	0	7	0	612	4	2	1518
6.34502- 1	4.55041- 1	3.14877- 1	1.92273- 1	7.63940- 2	2.72029- 2	612	4	2	1519
5.13037- 3	0	0	0	8	0	612	4	2	1520
0.0 + 0	1.72700+ 7	0	0	8	0	612	4	2	1521
7.14135- 1	5.11124- 1	3.62776- 1	2.43699- 1	1.21668- 1	4.84925- 2	612	4	2	1522
1.23698- 2	3.10810- 3	0	0	8	0	612	4	2	1523
0.0 + 0	1.82500+ 7	0	0	8	0	612	4	2	1524
7.15693- 1	5.09633- 1	3.52729- 1	2.36256- 1	1.21562- 1	5.08524- 2	612	4	2	1525
1.38579- 2	3.74000- 3	0	0	8	0	612	4	2	1526
0.0 + 0	2.00000+ 7	0	0	8	0	612	4	2	1527
7.42877- 1	5.34650- 1	3.71561- 1	2.52098- 1	1.36040- 1	5.85159- 2	612	4	2	1528
1.74169- 2	5.10247- 3	0	0	0	0	612	4	2	1529
6.01200+ 3	1.18969+ 1	0	1	0	0	612	4	51	1531
0.0 + 0	1.18969+ 1	0	2	0	0	612	4	51	1532
0.0 + 0	0.0 + 0	0	0	1	29	612	4	51	1533
29	2	0	0	0	0	612	4	51	1534

.....10.....20.....30.....40.....50.....60.....		MAT	MF	MT	SEQ
0.0	+ 0 4.81200+ 6	0	0	1	0 612 4 51 1535
0.0	+ 0				612 4 51 1536
0.0	+ 0 5.78000+ 6	0	0	2	0 612 4 51 1537
-7.08479-	2 3.90244- 2				612 4 51 1538
0.0	+ 0 6.00000+ 6	0	0	2	0 612 4 51 1539
-1.20370-	1 5.12346- 2				612 4 51 1540
0.0	+ 0 6.25000+ 6	0	0	2	0 612 4 51 1541
1.75809-	1 1.31646- 1				612 4 51 1542
0.0	+ 0 6.29100+ 6	0	0	2	0 612 4 51 1543
5.91017-	3 8.29787- 2				612 4 51 1544
0.0	+ 0 6.33300+ 6	0	0	3	0 612 4 51 1545
-5.18018-	2 2.90541- 2-3.52317- 2				612 4 51 1546
0.0	+ 0 6.52300+ 6	0	0	4	0 612 4 51 1547
3.73230-	2 6.40927- 2 5.51572- 2-4.54740- 2				612 4 51 1548
0.0	+ 0 6.56300+ 6	0	0	4	0 612 4 51 1549
9.02564-	2 6.95385- 2-8.79121- 4-3.86325- 2				612 4 51 1550
0.0	+ 0 6.60600+ 6	0	0	4	0 612 4 51 1551
5.46737-	2 4.02116- 2 1.36054- 2-4.58554- 2				612 4 51 1552
0.0	+ 0 6.94000+ 6	0	0	4	0 612 4 51 1553
-1.39303-	1 7.76119- 2-4.26439- 3-6.30182- 2				612 4 51 1554
0.0	+ 0 7.73000+ 6	0	0	2	0 612 4 51 1555
-4.54042-	2-1.26246- 2				612 4 51 1556
0.0	+ 0 8.00000+ 6	0	0	4	0 612 4 51 1557
-1.37828-	1 1.25340- 1 2.41970- 2 1.08122- 2				612 4 51 1558
0.0	+ 0 8.50000+ 6	0	0	4	0 612 4 51 1559
-4.89740-	2 2.21004- 1-6.78442- 2 2.36822- 2				612 4 51 1560
0.0	+ 0 9.00000+ 6	0	0	4	0 612 4 51 1561
-9.02141-	3 1.88532- 1 2.26081- 2 1.82977- 2				612 4 51 1562
0.0	+ 0 9.50000+ 6	0	0	4	0 612 4 51 1563
9.33992-	2 2.37629- 1 1.98858- 2 3.03847- 2				612 4 51 1564
0.0	+ 0 1.00000+ 7	0	0	4	0 612 4 51 1565
3.49478-	1 1.56810- 1 3.31911- 2 2.07170- 2				612 4 51 1566
0.0	+ 0 1.05000+ 7	0	0	4	0 612 4 51 1567
8.82650-	2 1.89302- 1 3.99415- 2 4.18142- 2				612 4 51 1568
0.0	+ 0 1.10000+ 7	0	0	4	0 612 4 51 1569
1.91263-	1 2.24890- 1 5.27061- 2 2.01909- 2				612 4 51 1570
0.0	+ 0 1.15000+ 7	0	0	4	0 612 4 51 1571
1.90683-	1 2.67021- 1 2.24510- 2 3.59446- 2				612 4 51 1572
0.0	+ 0 1.20000+ 7	0	0	4	0 612 4 51 1573
2.92040-	1 2.36795- 1 4.57866- 2-4.56862- 3				612 4 51 1574
0.0	+ 0 1.25000+ 7	0	0	5	0 612 4 51 1575
1.78059-	1 2.61459- 1 3.65964- 2 2.50814- 2 1.32630- 2				612 4 51 1576
0.0	+ 0 1.30000+ 7	0	0	5	0 612 4 51 1577
1.47042-	1 3.05801- 1 4.15197- 2 2.47622- 2-2.92413- 3				612 4 51 1578
0.0	+ 0 1.35000+ 7	0	0	5	0 612 4 51 1579
1.32688-	1 2.63037- 1 2.11736- 2 1.61995- 2-2.85431- 2				612 4 51 1580
0.0	+ 0 1.40000+ 7	0	0	5	0 612 4 51 1581
1.54981-	1 1.68005- 1-3.40368- 3-2.98767- 2-1.25008- 2				612 4 51 1582
0.0	+ 0 1.45000+ 7	0	0	5	0 612 4 51 1583
2.13734-	1 2.16996- 1-4.20601- 2-2.26037- 2-2.69996- 2				612 4 51 1584
0.0	+ 0 1.58500+ 7	0	0	3	0 612 4 51 1585
2.90325-	1 2.27331- 1 3.19383- 2				612 4 51 1586
0.0	+ 0 1.72700+ 7	0	0	3	0 612 4 51 1587
2.93183-	1 2.06212- 1 1.41194- 1				612 4 51 1588
0.0	+ 0 1.82500+ 7	0	0	3	0 612 4 51 1589

.....10.....		.....20.....		.....30.....		.....40.....		.....50.....		.....60.....		MAT	MF	MT	SEQ
4.36215-	1	2.55682-	1	1.13537-	1							612	4	51	1590	
0.0	+ 0	2.00000+	7		0		0		4			0	612	4	51	1591
4.45685-	1	3.04911-	1	1.71413-	1	7.01090-	2						612	4	51	1592
													612	4	0	1593
6.01200+	3	1.18969+	1		0		2		0			0	612	4	52	1594
0.0	+ 0	1.18969+	1		0		2		0			0	612	4	52	1595
0.0	+ 0	0.0	+ 0		0		0		1		19	612	4	52	1596	
	19		2		0		0		0			0	612	4	52	1597
0.0	+ 0	8.29700+	6		0		0		1			2	612	4	52	1598
	2		2		0		0		0			0	612	4	52	1599
-1.00000+	0	5.00000-	1	1.00000+	0	5.00000-	1						612	4	52	1600
0.0	+ 0	8.50000+	6		0		0		1		19	612	4	52	1601	
	19		2		0		0		0			0	612	4	52	1602
-1.00000+	0	4.75989-	1	-9.84810-	1	4.77550-	1	-9.39690-	1	4.82012-	1	612	4	52	1603	
-8.66030-	1	4.88804-	1	-7.66040-	1	4.97018-	1	-6.42790-	1	5.05551-	1	612	4	52	1604	
-5.00000-	1	5.13215-	1	-3.42020-	1	5.18887-	1	-1.73650-	1	5.21648-	1	612	4	52	1605	
0.0	+ 0	5.20878-	1	1.73650-	1	5.16376-	1	3.42020-	1	5.08393-	1	612	4	52	1606	
5.00000-	1	4.97598-	1	6.42790-	1	4.85023-	1	7.66040-	1	4.71977-	1	612	4	52	1607	
8.66030-	1	4.59872-	1	9.39690-	1	4.50078-	1	9.84810-	1	4.43706-	1	612	4	52	1608	
1.00000+	0	4.41495-	1									612	4	52	1609	
0.0	+ 0	9.00000+	6		0		0		1		19	612	4	52	1610	
	19		2		0		0		0			0	612	4	52	1611
-1.00000+	0	4.15320-	1	-9.84810-	1	4.20263-	1	-9.39690-	1	4.33981-	1	612	4	52	1612	
-8.66030-	1	4.53402-	1	-7.66040-	1	4.74555-	1	-6.42790-	1	4.93636-	1	612	4	52	1613	
-5.00000-	1	5.08084-	1	-3.42020-	1	5.16979-	1	-1.73650-	1	5.20831-	1	612	4	52	1614	
0.0	+ 0	5.20961-	1	1.73650-	1	5.18700-	1	3.42020-	1	5.14898-	1	612	4	52	1615	
5.00000-	1	5.09735-	1	6.42790-	1	5.03131-	1	7.66040-	1	4.95196-	1	612	4	52	1616	
8.66030-	1	4.86611-	1	9.39690-	1	4.78697-	1	9.84810-	1	4.73064-	1	612	4	52	1617	
1.00000+	0	4.71012-	1									612	4	52	1618	
0.0	+ 0	9.50000+	6		0		0		1		19	612	4	52	1619	
	19		2		0		0		0			0	612	4	52	1620
-1.00000+	0	4.03548-	1	-9.84810-	1	4.11677-	1	-9.39690-	1	4.33247-	1	612	4	52	1621	
-8.66030-	1	4.60826-	1	-7.66040-	1	4.85395-	1	-6.42790-	1	4.99805-	1	612	4	52	1622	
-5.00000-	1	5.01415-	1	-3.42020-	1	4.92865-	1	-1.73650-	1	4.80625-	1	612	4	52	1623	
0.0	+ 0	4.72276-	1	1.73650-	1	4.73455-	1	3.42020-	1	4.85995-	1	612	4	52	1624	
5.00000-	1	5.07685-	1	6.42790-	1	5.33694-	1	7.66040-	1	5.58713-	1	612	4	52	1625	
8.66030-	1	5.78842-	1	9.39690-	1	5.92502-	1	9.84810-	1	5.99992-	1	612	4	52	1626	
1.00000+	0	6.02322-	1									612	4	52	1627	
0.0	+ 0	1.00000+	7		0		0		1		19	612	4	52	1628	
	19		2		0		0		0			0	612	4	52	1629
-1.00000+	0	2.07717-	1	-9.84810-	1	2.22973-	1	-9.39690-	1	2.64657-	1	612	4	52	1630	
-8.66030-	1	3.21946-	1	-7.66040-	1	3.81298-	1	-6.42790-	1	4.31151-	1	612	4	52	1631	
-5.00000-	1	4.65677-	1	-3.42020-	1	4.85968-	1	-1.73650-	1	4.98371-	1	612	4	52	1632	
0.0	+ 0	5.10734-	1	1.73650-	1	5.28432-	1	3.42020-	1	5.51957-	1	612	4	52	1633	
5.00000-	1	5.77033-	1	6.42790-	1	5.97204-	1	7.66040-	1	6.07365-	1	612	4	52	1634	
8.66030-	1	6.06544-	1	9.39690-	1	5.98415-	1	9.84810-	1	5.89476-	1	612	4	52	1635	
1.00000+	0	5.85702-	1									612	4	52	1636	
0.0	+ 0	1.05000+	7		0		0		1		19	612	4	52	1637	
	19		2		0		0		0			0	612	4	52	1638
-1.00000+	0	7.36400-	4	-9.84810-	1	2.29535-	2	-9.39690-	1	8.43415-	2	612	4	52	1639	
-8.66030-	1	1.70905-	1	-7.66040-	1	2.64630-	1	-6.42790-	1	3.49361-	1	612	4	52	1640	
-5.00000-	1	4.15664-	1	-3.42020-	1	4.62746-	1	-1.73650-	1	4.96999-	1	612	4	52	1641	
0.0	+ 0	5.27727-	1	1.73650-	1	5.62180-	1	3.42020-	1	6.02042-	1	612	4	52	1642	
5.00000-	1	6.43106-	1	6.42790-	1	6.77839-	1	7.66040-	1	6.99763-	1	612	4	52	1643	
8.66030-	1	7.07025-	1	9.39690-	1	7.03429-	1	9.84810-	1	6.96458-	1	612	4	52	1644	

	10	20	30	40	50	60	MAT	MF	MT	SEQ					
1.00000+ 0	6.93173-	1						612	4	52	1645				
0.0 + 0	1.10000+	7	0	0	1	19	612	4	52	1646					
	19	2	0	0	0	0	612	4	52	1647					
-1.00000+ 0	1.34443-	3-9.84810-	1	2.93649-	2-9.39690-	1	1.05226-	1	612	4	52	1648			
-8.66030-	1	2.07380-	1-7.66040-	1	3.08872-	1-6.42790-	1	3.87184-	1	612	4	52	1649		
-5.00000-	1	4.31955-	1-3.42020-	1	4.47769-	1-1.73650-	1	4.50822-	1	612	4	52	1650		
0.0 + 0	4.60972-	1	1.73650-	1	4.92901-	1	3.42020-	1	5.49983-	1	612	4	52	1651	
5.00000-	1	6.23650-	1	6.42790-	1	6.98249-	1	7.66040-	1	7.58564-	1	612	4	52	1652
8.66030-	1	7.96498-	1	9.39690-	1	8.13444-	1	9.84810-	1	8.17518-	1	612	4	52	1653
1.00000+ 0	8.17628-	1						612	4	52	1654				
0.0 + 0	1.15000+	7	0	0	1	19	612	4	52	1655					
	19	2	0	0	0	0	612	4	52	1656					
-1.00000+ 0	3.50749-	3-9.84810-	1	3.67567-	2-9.39690-	1	1.25534-	1	612	4	52	1657			
-8.66030-	1	2.41193-	1-7.66040-	1	3.48578-	1-6.42790-	1	4.19574-	1	612	4	52	1658		
-5.00000-	1	4.43646-	1-3.42020-	1	4.31080-	1-1.73650-	1	4.07588-	1	612	4	52	1659		
0.0 + 0	4.02615-	1	1.73650-	1	4.36563-	1	3.42020-	1	5.12541-	1	612	4	52	1660	
5.00000-	1	6.16134-	1	6.42790-	1	7.22889-	1	7.66040-	1	8.09703-	1	612	4	52	1661
8.66030-	1	8.64341-	1	9.39690-	1	8.88643-	1	9.84810-	1	8.94406-	1	612	4	52	1662
1.00000+ 0	8.94516-	1						612	4	52	1663				
0.0 + 0	1.20000+	7	0	0	1	19	612	4	52	1664					
	19	2	0	0	0	0	612	4	52	1665					
-1.00000+ 0	1.91009-	1-9.84810-	1	2.29901-	1-9.39690-	1	3.29634-	1	612	4	52	1666			
-8.66030-	1	4.47032-	1-7.66040-	1	5.32183-	1-6.42790-	1	5.51098-	1	612	4	52	1667		
-5.00000-	1	5.01257-	1-3.42020-	1	4.12693-	1-1.73650-	1	3.34088-	1	612	4	52	1668		
0.0 + 0	3.10138-	1	1.73650-	1	3.61080-	1	3.42020-	1	4.73874-	1	612	4	52	1669	
5.00000-	1	6.09187-	1	6.42790-	1	7.20209-	1	7.66040-	1	7.74054-	1	612	4	52	1670
8.66030-	1	7.65367-	1	9.39690-	1	7.16426-	1	9.84810-	1	6.64443-	1	612	4	52	1671
1.00000+ 0	6.42705-	1						612	4	52	1672				
0.0 + 0	1.25000+	7	0	0	1	19	612	4	52	1673					
	19	2	0	0	0	0	612	4	52	1674					
-1.00000+ 0	1.63221-	1-9.84810-	1	2.02734-	1-9.39690-	1	3.04442-	1	612	4	52	1675			
-8.66030-	1	4.25285-	1-7.66040-	1	5.15167-	1-6.42790-	1	5.39570-	1	612	4	52	1676		
-5.00000-	1	4.95420-	1-3.42020-	1	4.12718-	1-1.73650-	1	3.40591-	1	612	4	52	1677		
0.0 + 0	3.24028-	1	1.73650-	1	3.82337-	1	3.42020-	1	4.99947-	1	612	4	52	1678	
5.00000-	1	6.34078-	1	6.42790-	1	7.35315-	1	7.66040-	1	7.70693-	1	612	4	52	1679
8.66030-	1	7.37999-	1	9.39690-	1	6.65140-	1	9.84810-	1	5.95576-	1	612	4	52	1680
1.00000+ 0	5.67388-	1						612	4	52	1681				
0.0 + 0	1.30000+	7	0	0	1	19	612	4	52	1682					
	19	2	0	0	0	0	612	4	52	1683					
-1.00000+ 0	1.59043-	1-9.84810-	1	1.93619-	1-9.39690-	1	2.83831-	1	612	4	52	1684			
-8.66030-	1	3.94522-	1-7.66040-	1	4.83131-	1-6.42790-	1	5.17807-	1	612	4	52	1685		
-5.00000-	1	4.92068-	1-3.42020-	1	4.28817-	1-1.73650-	1	3.70656-	1	612	4	52	1686		
0.0 + 0	3.59665-	1	1.73650-	1	4.16023-	1	3.42020-	1	5.26443-	1	612	4	52	1687	
5.00000-	1	6.49337-	1	6.42790-	1	7.34550-	1	7.66040-	1	7.48045-	1	612	4	52	1688
8.66030-	1	6.88662-	1	9.39690-	1	5.88802-	1	9.84810-	1	4.98790-	1	612	4	52	1689
1.00000+ 0	4.62962-	1						612	4	52	1690				
0.0 + 0	1.35000+	7	0	0	1	19	612	4	52	1691					
	19	2	0	0	0	0	612	4	52	1692					
-1.00000+ 0	1.67681-	1-9.84810-	1	1.99544-	1-9.39690-	1	2.83230-	1	612	4	52	1693			
-8.66030-	1	3.87255-	1-7.66040-	1	4.72443-	1-6.42790-	1	5.08034-	1	612	4	52	1694		
-5.00000-	1	4.86060-	1-3.42020-	1	4.26994-	1-1.73650-	1	3.71865-	1	612	4	52	1695		
0.0 + 0	3.62877-	1	1.73650-	1	4.21212-	1	3.42020-	1	5.34035-	1	612	4	52	1696	
5.00000-	1	6.58732-	1	6.42790-	1	7.43319-	1	7.66040-	1	7.52367-	1	612	4	52	1697
8.66030-	1	6.85104-	1	9.39690-	1	5.76118-	1	9.84810-	1	4.78846-	1	612	4	52	1698
1.00000+ 0	4.40260-	1						612	4	52	1699				

	10	20	30	40	50	60	MAT	MF	MT	SEQ					
0.0	+ 0	1.40000+	7	0	0	1	19	612	4	52	1700				
	19		2	0	0	0	0	612	4	52	1701				
-1.00000+	0	1.75990-	1-9.84810-	1	2.00027-	1-9.39690-	1	2.64216-	1	612	4	52	1702		
-8.66030-	1	3.46940-	1-7.66040-	1	4.19510-	1-6.42790-	1	4.56611-	1	612	4	52	1703		
-5.00000-	1	4.47708-	1-3.42020-	1	4.04076-	1-1.73650-	1	3.56532-	1	612	4	52	1704		
0.0	+ 0	3.42488-	1	1.73650-	1	3.87711-	1	3.42020-	1	4.92061-	1	612	4	52	1705
5.00000-	1	6.27840-	1	6.42790-	1	7.52646-	1	7.66040-	1	8.30168-	1	612	4	52	1706
8.66030-	1	8.47683-	1	9.39690-	1	8.20675-	1	9.84810-	1	7.82564-	1	612	4	52	1707
1.00000+	0	7.65500-	1					612	4	52	1708				
0.0	+ 0	1.45000+	7	0	0	1	19	612	4	52	1709				
	19		2	0	0	0	0	612	4	52	1710				
-1.00000+	0	1.21355-	1-9.84810-	1	1.59369-	1-9.39690-	1	2.57785-	1	612	4	52	1711		
-8.66030-	1	3.75998-	1-7.66040-	1	4.65241-	1-6.42790-	1	4.89910-	1	612	4	52	1712		
-5.00000-	1	4.44724-	1-3.42020-	1	3.59122-	1-1.73650-	1	2.85165-	1	612	4	52	1713		
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8.66030-	1	9.00471-	1	9.39690-	1	8.64948-	1	9.84810-	1	8.21522-	1	612	4	52	1716
1.00000+	0	8.02825-	1					612	4	52	1717				
0.0	+ 0	1.50000+	7	0	0	1	19	612	4	52	1718				
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5.00000-	1	5.42968-	1	6.42790-	1	6.49790-	1	7.66040-	1	7.64490-	1	612	4	52	1724
8.66030-	1	8.58669-	1	9.39690-	1	9.18647-	1	9.84810-	1	9.47464-	1	612	4	52	1725
1.00000+	0	9.55331-	1					612	4	52	1726				
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5.00000-	1	6.62173-	1	6.42790-	1	7.96239-	1	7.66040-	1	8.65211-	1	612	4	52	1733
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1.00000+	0	6.51571-	1					612	4	52	1744				
0.0	+ 0	1.82500+	7	0	0	1	19	612	4	52	1745				
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5.00000-	1	7.83682-	1	6.42790-	1	9.12899-	1	7.66040-	1	9.29675-	1	612	4	52	1751
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5.00000-	1 8.47927-	1 6.42790-	1 9.55177-	1 7.66040-	1 9.30799-	1 612	4	52 1760		
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1.00000+	0 5.17058-	1				612	4	52 1762		
						612	4	0 1763		
6.01200+	3 1.18969+	1	0	2	0	0	612	4	53 1764	
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	15	2	0	0	0	0	612	4	53 1767	
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-1.00000+	0 5.00000-	1 1.00000+	0 5.00000-	1			612	4	53 1770	
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-5.00000-	1 4.90852-	1-3.42020-	1 4.95212-	1-1.73650-	1 4.99372-	1 612	4	53 1775		
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5.00000-	1 5.34875-	1 6.42790-	1 5.22306-	1 7.66040-	1 5.07075-	1 612	4	53 1786		
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0.0	+ 0 5.63184-	1 1.73650-	1 5.68881-	1 3.42020-	1 5.61703-	1 612	4	53 1794		
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1.00000+	0 4.04790-	1				612	4	53 1797		
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5.00000-	1 5.30083-	1 6.42790-	1 5.31913-	1 7.66040-	1 5.29803-	1 612	4	53 1804		
8.66030-	1 5.24551-	1 9.39690-	1 5.18079-	1 9.84810-	1 5.12837-	1 612	4	53 1805		
1.00000+	0 5.10826-	1				612	4	53 1806		
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	19	2	0	0	0	0	612	4	53 1808	
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	10	20	30	40	50	60	MAT	MF	MT	SEQ		
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5.00000-	1	5.33180-	1	6.42790-	1	5.36861-	1	7.66040-	1	5.34861-	1	612 4 53 1813
8.66030-	1	5.28038-	1	9.39690-	1	5.19115-	1	9.84810-	1	5.11692-	1	612 4 53 1814
1.00000+	0	5.08821-	1							612 4 53 1815		
0.0	+	1.30000+	7	0	0	0	1	19	612 4 53 1816			
	19	2	0	0	0	0	0	0	612 4 53 1817			
-1.00000+	0	4.35622-	1-9.84810-	1	4.39153-	1-9.39690-	1	4.48526-	1	612 4 53 1818		
-8.66030-	1	4.60630-	1-7.66040-	1	4.71904-	1-6.42790-	1	4.79947-	1	612 4 53 1819		
-5.00000-	1	4.84488-	1-3.42020-	1	4.87330-	1-1.73650-	1	4.91251-	1	612 4 53 1820		
0.0	+	4.98433-	1	1.73650-	1	5.09157-	1	3.42020-	1	5.21381-	1	612 4 53 1821
5.00000-	1	5.31505-	1	6.42790-	1	5.35906-	1	7.66040-	1	5.32725-	1	612 4 53 1822
8.66030-	1	5.22922-	1	9.39690-	1	5.10187-	1	9.84810-	1	4.99604-	1	612 4 53 1823
1.00000+	0	4.95512-	1							612 4 53 1824		
0.0	+	1.35000+	7	0	0	0	1	19	612 4 53 1825			
	19	2	0	0	0	0	0	0	612 4 53 1826			
-1.00000+	0	4.50841-	1-9.84810-	1	4.54712-	1-9.39690-	1	4.64605-	1	612 4 53 1827		
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-5.00000-	1	4.86221-	1-3.42020-	1	4.82690-	1-1.73650-	1	4.82140-	1	612 4 53 1829		
0.0	+	4.87911-	1	1.73650-	1	5.00365-	1	3.42020-	1	5.16450-	1	612 4 53 1830
5.00000-	1	5.30914-	1	6.42790-	1	5.38496-	1	7.66040-	1	5.36295-	1	612 4 53 1831
8.66030-	1	5.25252-	1	9.39690-	1	5.09988-	1	9.84810-	1	4.97014-	1	612 4 53 1832
1.00000+	0	4.91953-	1							612 4 53 1833		
0.0	+	1.40000+	7	0	0	0	1	19	612 4 53 1834			
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5.00000-	1	5.18457-	1	6.42790-	1	5.08417-	1	7.66040-	1	4.92337-	1	612 4 53 1840
8.66030-	1	4.72987-	1	9.39690-	1	4.54347-	1	9.84810-	1	4.40777-	1	612 4 53 1841
1.00000+	0	4.35808-	1							612 4 53 1842		
0.0	+	1.45000+	7	0	0	0	1	19	612 4 53 1843			
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0.0	+	4.64380-	1	1.73650-	1	4.82843-	1	3.42020-	1	5.05655-	1	612 4 53 1848
5.00000-	1	5.27157-	1	6.42790-	1	5.42811-	1	7.66040-	1	5.50378-	1	612 4 53 1849
8.66030-	1	5.50388-	1	9.39690-	1	5.45700-	1	9.84810-	1	5.40422-	1	612 4 53 1850
1.00000+	0	5.38183-	1							612 4 53 1851		
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5.00000-	1	5.07508-	1	6.42790-	1	4.86397-	1	7.66040-	1	4.71333-	1	612 4 53 1858
8.66030-	1	4.64566-	1	9.39690-	1	4.64166-	1	9.84810-	1	4.66225-	1	612 4 53 1859
1.00000+	0	4.67335-	1							612 4 53 1860		
0.0	+	1.58500+	7	0	0	0	1	19	612 4 53 1861			
	19	2	0	0	0	0	0	0	612 4 53 1862			
-1.00000+	0	6.18776-	1-9.84810-	1	6.11183-	1-9.39690-	1	5.89713-	1	612 4 53 1863		
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5.00000-	1	5.14622-	1	6.42790-	1	5.32606-	1	7.66040-	1	5.46563-	1	612 4 53 1867
8.66030-	1	5.56054-	1	9.39690-	1	5.61299-	1	9.84810-	1	5.63397-	1	612 4 53 1868
1.00000+	0	5.63857-	1							612 4 53 1869		
0.0	+ 0	1.72700+	7	0	0	1	19	612 4 53 1870				
	19	2	0	0	0	0	0	612 4 53 1871				
-1.00000+	0	6.21364-	1-9.84810-	1	6.08053-	1-9.39690-	1	5.72949-	1	612 4 53 1872		
-8.66030-	1	5.27827-	1-7.66040-	1	4.85249-	1-6.42790-	1	4.52919-	1	612 4 53 1873		
-5.00000-	1	4.32244-	1-3.42020-	1	4.21068-	1-1.73650-	1	4.17755-	1	612 4 53 1874		
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5.00000-	1	5.04168-	1	6.42790-	1	5.56395-	1	7.66040-	1	6.20217-	1	612 4 53 1876
8.66030-	1	6.88539-	1	9.39690-	1	7.49137-	1	9.84810-	1	7.90039-	1	612 4 53 1877
1.00000+	0	8.04308-	1							612 4 53 1878		
0.0	+ 0	1.82500+	7	0	0	1	19	612 4 53 1879				
	19	2	0	0	0	0	0	612 4 53 1880				
-1.00000+	0	6.10713-	1-9.84810-	1	5.98880-	1-9.39690-	1	5.67571-	1	612 4 53 1881		
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-5.00000-	1	4.26734-	1-3.42020-	1	4.07258-	1-1.73650-	1	3.97231-	1	612 4 53 1883		
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5.00000-	1	5.15441-	1	6.42790-	1	5.77638-	1	7.66040-	1	6.47658-	1	612 4 53 1885
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1.00000+	0	8.39000-	1							612 4 53 1887		
0.0	+ 0	2.00000+	7	0	0	1	19	612 4 53 1888				
	19	2	0	0	0	0	0	612 4 53 1889				
-1.00000+	0	6.33841-	1-9.84810-	1	6.18298-	1-9.39690-	1	5.77626-	1	612 4 53 1890		
-8.66030-	1	5.25880-	1-7.66040-	1	4.76827-	1-6.42790-	1	4.37052-	1	612 4 53 1891		
-5.00000-	1	4.06107-	1-3.42020-	1	3.82793-	1-1.73650-	1	3.71360-	1	612 4 53 1892		
0.0	+ 0	3.80718-	1	1.73650-	1	4.16611-	1	3.42020-	1	4.75002-	1	612 4 53 1893
5.00000-	1	5.44405-	1	6.42790-	1	6.15036-	1	7.66040-	1	6.83272-	1	612 4 53 1894
8.66030-	1	7.46162-	1	9.39690-	1	7.96321-	1	9.84810-	1	8.26739-	1	612 4 53 1895
1.00000+	0	8.36455-	1							612 4 53 1896		
										612 4 0 1897		
6.01200+	3	1.18969+	1	0	2	0	0	612 4 91 1898				
0.0	+ 0	1.18969+	1	0	2	0	0	612 4 91 1899				
0.0	+ 0	0.0	+ 0	0	0	0	1	2 612 4 91 1900				
	2	2	0	0	0	0	0	0 612 4 91 1901				
0.0	+ 0	7.88700+	6	0	0	0	1	2 612 4 91 1902				
	2	2	0	0	0	0	0	0 612 4 91 1903				
-1.00000+	0	5.00000-	7	1.00000+	0	5.00000-	1	612 4 91 1904				
0.0	+ 0	2.00000+	7	0	0	0	1	2 612 4 91 1905				
	2	2	0	0	0	0	0	0 612 4 91 1906				
-1.00000+	0	5.00000-	7	1.00000+	0	5.00000-	1	612 4 91 1907				
								612 4 0 1908				
								612 0 0 1909				
6.01200+	3	1.18969+	1	0	0	1	0	612 5 91 1910				
7.88700+	6	0.0	+ 0	0	9	1	2	612 5 91 1911				
	2	2	0	0	0	0	0	0 612 5 91 1912				
7.88700+	6	1.00000+	0	2.00000+	7	1.00000+	0	612 5 91 1913				
0.0	+ 0	0.0	+ 0	0	0	0	14	612 5 91 1914				
	14	2	0	0	0	0	0	0 612 5 91 1915				
7.88700+	6	8.20000+	5	8.00000+	6	8.26000+	5	9.00000+	6	8.76000+	5	612 5 91 1916
1.00000+	7	9.24000+	5	1.10000+	7	9.69000+	5	1.20000+	7	1.01200+	6	612 5 91 1917
1.30000+	7	1.05300+	6	1.40000+	7	1.09300+	6	1.50000+	7	1.13100+	6	612 5 91 1918
1.60000+	7	1.16800+	6	1.70000+	7	1.20400+	6	1.80000+	7	1.23900+	6	612 5 91 1919

.....10.....20.....30.....40.....50.....60.....						MAT	MF	MT	SEQ
1.90000+	7	1.27300+	6	2.00000+	7	1.30600+	6	612 5 91	1920
								612 5 0	1921
								612 0 0	1922
6.01200+	3	1.18969+	1		1	0		0 61212 51	1923
4.43910+	6	4.43910+	6		0	2		2 61212 51	1924
	2		2		0	0		0 61212 51	1925
4.81200+	6	1.00000+	0	2.00000+	7	1.00000+	0	61212 51	1926
								61212 0	1927
6.01200+	3	1.18969+	1		1	0		0 61212102	1928
0.0	+ 0	0.0	+ 0		0	0		2 61212102	1929
	2		1		0	0		0 61212102	1930
1.00000-	5	1.32000+	0	2.00000+	7	1.32000+	0	61212102	1931
4.94639+	6	0.0	+ 0		2	2		2 61212102	1932
	2		1		0	0		0 61212102	1933
1.00000-	5	6.80000-	1	2.00000+	7	6.80000-	1	61212102	1934
3.68440+	6	3.68440+	6		1	2		2 61212102	1935
	2		1		0	0		0 61212102	1936
1.00000-	5	3.20000-	1	2.00000+	7	3.20000-	1	61212102	1937
1.26199+	6	0.0	+ 0		2	2		2 61212102	1938
	2		1		0	0		0 61212102	1939
1.00000-	5	3.20000-	1	2.00000+	7	3.20000-	1	61212102	1940
								61212 0	1941
								612 0 0	1942
6.01200+	3	1.18969+	1		0	1		0 61214 51	1943
4.43910+	6	4.43910+	6		0	0		38 61214 51	1944
	38		2		0	0		0 61214 51	1945
0.0	+ 0	4.81200+	6		0	0		0 61214 51	1946
0.0	+ 0	3.40000-	1					61214 51	1947
0.0	+ 0	4.84970+	6		0	0		0 61214 51	1948
0.0	+ 0	3.35830-	1					61214 51	1949
0.0	+ 0	5.10810+	6		0	0		0 61214 51	1950
0.0	+ 0	3.24000-	1					61214 51	1951
0.0	+ 0	5.30910+	6		0	0		0 61214 51	1952
0.0	+ 0	3.10490-	1					61214 51	1953
0.0	+ 0	5.48140+	6		0	0		0 61214 51	1954
0.0	+ 0	2.93600-	1					61214 51	1955
0.0	+ 0	5.68240+	6		0	0		0 61214 51	1956
0.0	+ 0	2.76710-	1					61214 51	1957
0.0	+ 0	5.85470+	6		0	0		0 61214 51	1958
0.0	+ 0	2.56440-	1					61214 51	1959
0.0	+ 0	6.02700+	6		0	0		0 61214 51	1960
0.0	+ 0	2.25200-	1					61214 51	1961
0.0	+ 0	6.14180+	6		0	0		0 61214 51	1962
0.0	+ 0	1.94790-	1					61214 51	1963
0.0	+ 0	6.22790+	6		0	0		0 61214 51	1964
0.0	+ 0	1.44120-	1					61214 51	1965
0.0	+ 0	6.34280+	6		0	0		0 61214 51	1966
0.0	+ 0	9.34520-	2					61214 51	1967
0.0	+ 0	6.42890+	6		0	0		0 61214 51	1968
0.0	+ 0	3.94040-	2					61214 51	1969
0.0	+ 0	6.51510+	6		0	0		0 61214 51	1970
0.0	+ 0	3.09010-	3					61214 51	1971
0.0	+ 0	6.62990+	6		0	0		0 61214 51	1972
0.0	+ 0	-7.88840-	3					61214 51	1973
0.0	+ 0	6.85960+	6		0	0		0 61214 51	1974

.....10.....20.....30.....40.....50.....60.....		MAT	MF	MT	SEQ
0.0	+ 0 2.16690- 2				61214 51 1975
0.0	+ 0 7.00320+ 6	0	0	2	0 61214 51 1976
0.0	+ 0 8.75410- 2				61214 51 1977
0.0	+ 0 7.11810+ 6	0	0	2	0 61214 51 1978
0.0	+ 0 1.19630- 1				61214 51 1979
0.0	+ 0 7.20420+ 6	0	0	2	0 61214 51 1980
0.0	+ 0 1.45810- 1				61214 51 1981
0.0	+ 0 7.40520+ 6	0	0	2	0 61214 51 1982
0.0	+ 0 1.62700- 1				61214 51 1983
0.0	+ 0 7.52000+ 6	0	0	2	0 61214 51 1984
0.0	+ 0 1.25540- 1				61214 51 1985
0.0	+ 0 7.60620+ 6	0	0	2	0 61214 51 1986
0.0	+ 0 8.75410- 2				61214 51 1987
0.0	+ 0 7.72100+ 6	0	0	2	0 61214 51 1988
0.0	+ 0 9.00170- 3				61214 51 1989
0.0	+ 0 7.77850+ 6	0	0	2	0 61214 51 1990
0.0	+ 0-3.99800- 2				61214 51 1991
0.0	+ 0 7.89330+ 6	0	0	2	0 61214 51 1992
0.0	+ 0-5.35490- 3				61214 51 1993
0.0	+ 0 8.00820+ 6	0	0	2	0 61214 51 1994
0.0	+ 0 4.61600- 2				61214 51 1995
0.0	+ 0 8.15170+ 6	0	0	2	0 61214 51 1996
0.0	+ 0 9.34520- 2				61214 51 1997
0.0	+ 0 8.26660+ 6	0	0	2	0 61214 51 1998
0.0	+ 0 1.38210- 1				61214 51 1999
0.0	+ 0 8.84090+ 6	0	0	2	0 61214 51 2000
0.0	+ 0 1.66920- 1				61214 51 2001
0.0	+ 0 9.75970+ 6	0	0	2	0 61214 51 2002
0.0	+ 0 1.78750- 1				61214 51 2003
0.0	+ 0 1.08800+ 7	0	0	2	0 61214 51 2004
0.0	+ 0 1.77900- 1				61214 51 2005
0.0	+ 0 1.20280+ 7	0	0	2	0 61214 51 2006
0.0	+ 0 1.68610- 1				61214 51 2007
0.0	+ 0 1.33490+ 7	0	0	2	0 61214 51 2008
0.0	+ 0 1.56790- 1				61214 51 2009
0.0	+ 0 1.46700+ 7	0	0	2	0 61214 51 2010
0.0	+ 0 1.42430- 1				61214 51 2011
0.0	+ 0 1.58180+ 7	0	0	2	0 61214 51 2012
0.0	+ 0 1.34830- 1				61214 51 2013
0.0	+ 0 1.69090+ 7	0	0	2	0 61214 51 2014
0.0	+ 0 1.25540- 1				61214 51 2015
0.0	+ 0 1.78860+ 7	0	0	2	0 61214 51 2016
0.0	+ 0 1.16250- 1				61214 51 2017
0.0	+ 0 1.90340+ 7	0	0	2	0 61214 51 2018
0.0	+ 0 1.04430- 1				61214 51 2019
0.0	+ 0 2.00000+ 7	0	0	2	0 61214 51 2020
0.0	+ 0 9.34520- 2				61214 51 2021
					61214 0 2022
6.01200+ 3	1.18969+ 1	1	0	3	0 61214102 2023
					61214 0 2024
					612 0 0 2025
					0 0 0 2026
					-1 0 0 0