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LEVEL OF TEST MODEL USER'S GUIDE

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Table of Contents

Tables

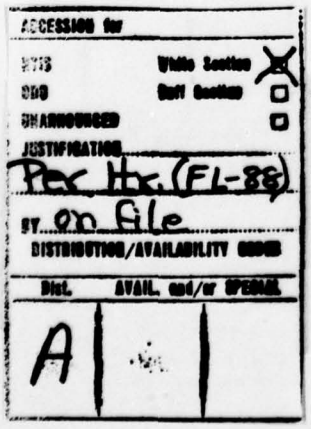
Figures

MODEL APPLICATION

The model selects the lowest cost combination of test equipment configurations and test periods which will result in the desired probability that the item tested will operate properly when used. It is particularly applicable to items, such as missiles, which can not be tried to see if they work. The model will be most useful when used early in a program so that it can influence test equipment design. Nevertheless, if the test equipment has already been purchased, the model can be used to determine the least costly test periods.

The model can be used to simulate up to three echelons of test. These might be a built in test, an intermediate test, and a depot test. The model automatically indicates if the highest echelon of test is unnecessary.

The model can be used to evaluate the advantages of one location of a particular test echelon over another. For example, the model can be used to decide which is the best economic choice, shipboard test or test at a weapons station.



USING THE PROGRAM

Input Information

To determine the lowest cost test scheme one must start with certain information. Table 1 lists this information It has been divided into three blocks. Each block has its own input format which will be discussed below. Some explanation of the terms may be of value.

The cost of packing and shipping to the ith echelon tester (Items 3 and 4 of Block 1) is the round trip cost of packing and shipping from wherever the item is normally used to the first echelon for i=1, from first to second echelon for i=2, and from second to third for i=3. The units are dollars.

The phrase "functions tested" (Items 7 and 8 of Block 1) refers to the tests which might be performed on the item to ascertain if it is in good operating condition. For example, we might test the timing, compression, fuel pressure, battery charge, spark plug gap, and breaker point gaps of an internal combustion engine. Each of these would be a function. The cost of the equipment for testing the compression, for example, would be the cost of a compression gauge. The time required to repair this equipment would be the time needed to repair

the compression gauge. The failure rate of the equipment to test the compression would be the failure rate of compression gauges. The time required to test the compression would be the time to unscrew the spark plugs, insert the gauge and read the pressure, and reinstall the plugs. The failure rate of the compression would be the number of compression failures per use cycle. We might choose one hour as a use cycle or we might pick some more convenient period depending on the application of the engine.

These functions must be ordered according to increasing values of the ratio of the cost of the equipment needed to test the function to the failure rate of the function tested. This will result in detecting the greatest number of failures per test set dollar at first echelon. Usually there are more first echelon testers than second echelon and third echelon testers. Therefore, this procedure will result in least test equipment cost. The order number of a function is referred to as m.

In many cases one will have some idea what tests should be performed at each echelon. If so, limits can be set on the range of the m's which define what tests are performed. The variation of total costs as the m's change within the range can be studied. The initial and final values of the index, m, of functions tested and also the increment by which the index is to be increased each loop are specified under Items 7 and 8 of Block 1.

The number of functions tested (Item 1 of Block 2) is the total number of functions of the item which it is proposed to test. It is possible that the analysis will show that it is not economically desirable to test all of these. The value of item 1 of Block 2 must not exceed 20.

The fraction of items in use which are not defective (Item 2 of Block 2) is the fraction of the time that when an item is used it will operate properly. This is sometimes called the operational ready rate. It is the major constraint in minimizing testing costs.

The repair material rate (Item 3 of Block 2) is the ratio of the average cost of the materials to make one repair, to the item cost.

The other input quantities are self explanatory. To simulate two test echelons, the first two values of Item 8, Block 1 are set equal to the total number of functions which can be tested and the third value is set equal to one. The number of testers at third echelon is set equal to zero.

TABLE 1

INPUT DATA BLOCKS

CARD NUMBER	
BLOCK 1	1. Payrate at the ith echelon Tester (i=1,2,3) ($/Hr)
	2. Number of men to operate the ith echelon tester (i=1,2,3) (Dimensionless)
	3. Cost of shipping to the ith echelon Tester (i=1,2,3) ($)
	4. Cost of packing to ship to the ith echelon tester (i=1,2,3) ($)
	5. Time to send item to the ith echelon, test it, and return it (Years)
	6. Number of testers at the ith echelon (i=1,2,3) (dimensionless)
	7. Number of functions tested at echelon 1 (initial value=XNFUN1, final value=XHVAL1, increment=F1STEP) (dimensionless)
	8. Number of functions tested at echelon 2 (initial value=XNFUN2, final value=XHVAL2, increment=F2STEP) (dimensionless)
	9. Number of cycles between echelon 1 tests (initial value=XN1, final value=XN1F, increment=STEP1) (dimensionless)
	10. Number of echelon 1 tests between echelon 2 tests (initial value=XN2, final value=XN2F, increment=STEP2)
	11. Item cost ($) item service life (Years), number items (dimensionless)

BLOCK 2

1. Number of functions tested ($m \leq 20$) (dimensionless)
2. Fraction of items in use which are not defective (dimensionless)
3. Repair material ratio (fraction between 0 and 1) (dimensionless)
4. Number use cycles per year (cycles/year)
5. Initial value of the number of second echelon tests, n_3, per third echelon test (or first echelon tests, (n_2), per second echelon test). This number is used for determining n_3 (or n_2) by Newton-Raphson method (dimensionless)
6. Maximum number of iterations for Newton-Raphson method: 20 recommended. (dimensionless)

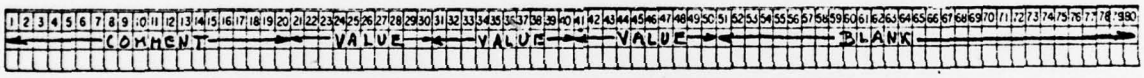
BLOCK 3

1. Time required to repair equipment used to test ith function in order from 1 to m followed by the time required to repair basic test equipment. (Hours)
2. Cost of equipment to test ith function in order from 1 to m followed by cost of basic test equipment. ($)
3. Failure rate of equipment to test ith function in order form 1 to m followed by failure rate of basic test equipment. (Failures/Hour)
4. Failure rate of ith function of item in order from 1 to m followed by failure rate of item as a whole. (Failures/Hour)
5. Time required to test ith function in order from 1 to m followed by the test set up time.

Input Format

The input data format is different for each of the three blocks. The first is an 11 x 3 matrix, the second a 6 x 1 matrix, the third a 5 x the total number of missile functions being tested plus one.

BLOCK 1 - consists of 11 cards of data, 3 items per card. Data are punched in successive 10 column fields beginning in column 21. The format of a block 1 data card is given below.



BLOCK 2 - consists of six cards consisting of one data item each, punched in a 10 column field beginning in column 21. The format of a block 2 data card is given below.

BLOCK 3 - consists of 5 rows of data each of which contains m items ($m \leq 21$). The m data items are punched 4 items per card in successive 15 column fields beginning in column 21. The format of a block 3 data card is given below.

Since m may equal 21, up to five cards of data may be required for each row of block 3 data. When punching data cards always use the decimal points in each data item.

Figure 1 shows how the deck is arranged. In the figure a delta indicates blank. The punching for all cards except the data deck begins in column 1. The region value on the second card may be changed to accommodate a large number of cases of n_1, n_2, m_1, and m_2.

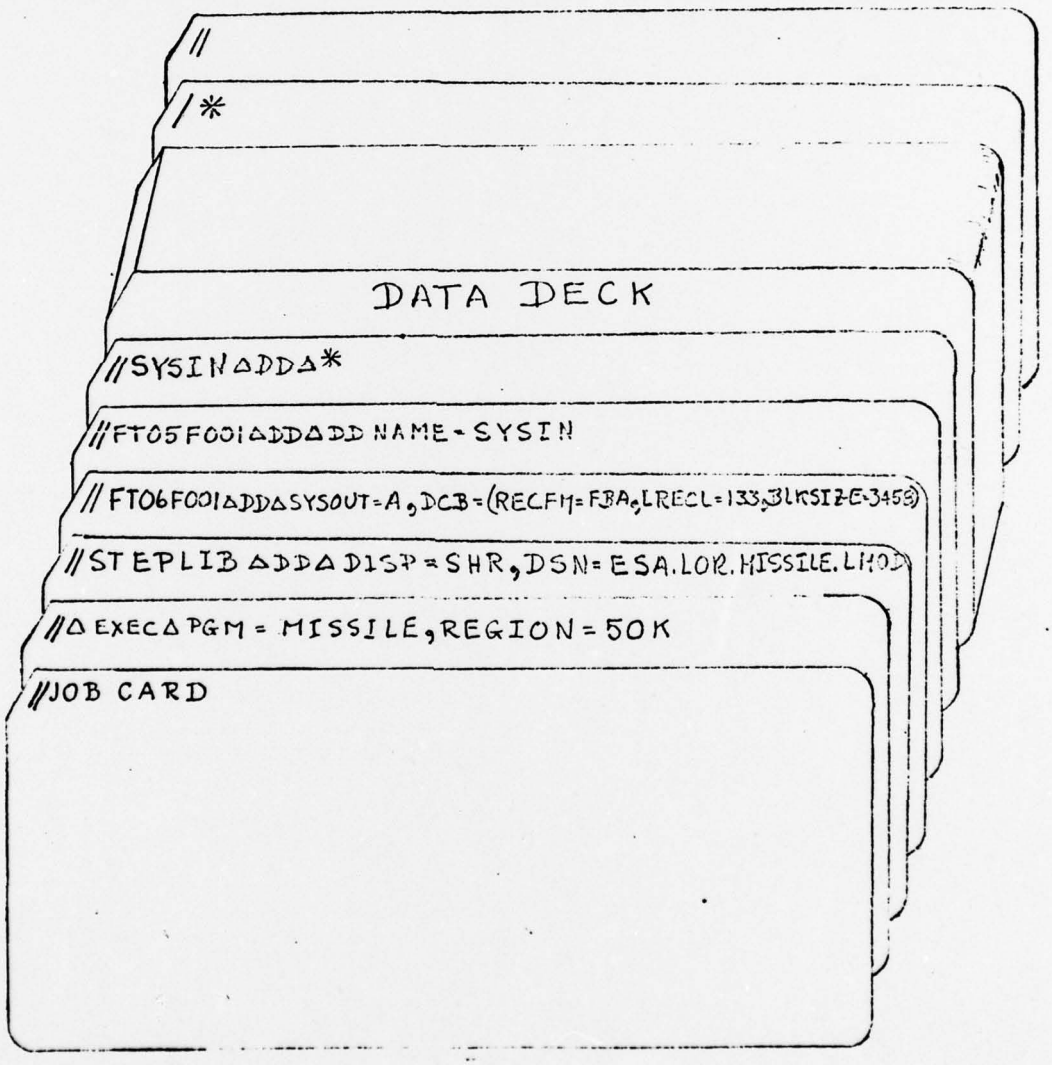


FIGURE 1

DATA DECK ARRANGEMENT

Interpreting Results

Table 3 shows the results of a sample run. The far right hand column in Test Cost Summary is the cost of testing using the equipment indicated by the numbers in the first two columns and the test schedule from the next three. An I in the fifth column indicates that the third echelon test was not necessary to obtain the required probability, U, that the item is unfailed when needed. A star in the fifth column indicates that for some reason the program was unable to calculate a value for n_3. The reason is also given. The most common cause of an inability to calculate is that the third echelon test must be performed more frequently than the second echelon test in order to obtain the required value of U. Frequently, this condition can be detected by looking at the preceeding values of n_3 for the same values of m_1, m_2, and n_1. If n_3 was getting close to one, it is likely that it would have to be less than one and there would not be a solution. In either of these two cases no action is necessary.

The sixth, seventh, and eighth columns are the probabilities that failed items will be detected at, or before, the test level. The ninth, tenth, and eleventh columns are the cost of performing a single test at the test level, or echelon. The twelfth column is the cost per use cycle of testing all of the items. It does not include the cost of the test equipment.

Occasionally, a solution is not found on the first try and it is not obvious that the reason is either of those given above. Possible reaction to the error messages are:

1. NO CONVERGENCE WITHIN___ ITERATIONS. A solution may not be obtained because more iterations are needed to produce the desired accuracy. The situation can be corrected by increasing the input quantity "maximum number of iterations for Newton-Raphson method".

2. AT SOME ITERATION STEP DERIVATIVE IS ZERO. If a zero is encountered in the denominator of an expression, the Newton-Raphson method terminates.

3. INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE. Because the expression being solved contains exponentials it is possible that a value too large to be handled by the computer will be encountered. This difficulty can be eliminated be selecting another initial value for Item 5 of Block 2.

The range of n_2 should be expanded if the service life cost does not pass through a minimum for every combination of m_1, m_2, and n_1. An exception to this rule is if the third echelon test would have to be performed more frequently than the second echelon test as discussed above.

Once there is a minimum service life cost of testing for every combination of m_1, m_2, and n_1; check to see if there is also a minimum of these minimums for every combination of

m_1 and m_2. If there is not, increase the range of n_1 until a minimum is obtained. The minimum of this minimum of the minimums is the least cost testing scheme. That is, the first m_1 functions should be tested at the first echelon, the next m_2-m_1 functions should be tested at second echelon, the remaining functions should be tested at third echelon, first echelon tests should be performed every n_1 times the item is used, second echelon tests should be performed every n_2 times a first echelon test is performed, and third echelon tests should be performed every n_3 times the second echelon test is performed. Naturally, third echelon tests will not be necessary if an I appears under n_3.

Table 3 is a sample run. It will be seen that as n_2 is varied, holding m_1, m_2, and n_1 constant, a minimum was not always reached. For example, when m_1 is 1, m_2 is 2, and n_1 is 1 the total cost is still decreasing. One might guess that it will never get as low as the \$14,356,321 which is reached for m_1=4, m_2=10, and n_1=5 but, to be sure, the range of n_2 should be increased until a minimum is found.

In the case of m_1=1, m_2=2, and n_1=5, n_3 does become less than 1. In cases like this, the lowest cost scheme for which n_3 is not less than 1 will be the minimum.

In the case of $m_1=2$, $m_2=10$, and $n_1=1$; $n_3=I$ indicating that third echelon testing is not necessary. The service life cost is calculated assuming no third echelon test equipment is purchased. For these cases, the range of n_2 must be expanded until a minimum is reached. The case $m_1=2$, $m_2=10$, and $n=3$ illustrates what may happen. In this case n_3 becomes finite, and then becomes less than 1. It turned out, in this case, that a minimum was reached first.

We must also be able to find a minimum of the minimums for every set of m_1 and m_2. In at least two cases, not only is this minimum of minimums not found within the range of n_2, but it seems very likely that the minimum cost may be less than the lowest cost found in this run. These cases are $m_1=1$ and $m_2=4$ and 6. There may be others. Consequently, another run, with increased n_1 range, is necessary. This second run is given in table 4. It will be seen that the range of n_1 is still not great enough. Therefore, the run of table 5 was made.

In preparing table 5, the indices were incremented by 1 because it was expected that this would be the final run and it was necessary to consider all possible test equipment configurations and test intervals.The range of n_1 was extended to complement the previous results. The range of n_2 was contracted based on the results of table 4.

In every case but $m_1=10$, $m_2=11$ a minimum is found or at least it is obvious that the values of the service life costs have leveled off. For the exception it can be argued that this case could not be the least cost since the values have been increasing with m_1. It will be seen that the cheapest combination of test equipment configurations and test periods is for testing every 14 use cycles at first echelon with a tester which tests the first 5 functions, testing every 14X3=42 use cycles with a tester which tests the next 11-5=6 functions, and testing every 14X3X6=252 use cycles with a tester that test the last 12-11=1 function. We have not considered the possibility of performing all tests at first and second echelon and none at third. It is possible that a lower cost might be found if this were done.

Table 6 is a run for two echelons of test. It will be seen that a minimum as a function of n_1 is not found in this run and it was necessary to increase the range of n_1 as shown in table 7. In this table it is seen that the minimum cost of testing using only two echelons is greater than for using three echelons. Therefore, the minimum cost test equipment configurations and test periods are those cited above.

MATHEMATICAL MODEL

The mathematical model is based on the testing scheme which is diagramed in figure 2. The first echelon test is performed every n_1 times the item is used. The second echelon test is performed every n_2 times the first echelon test is performed. The third echelon test is performed every n_3 times the second echelon test is performed. When an item fails a test it is repaired or replaced and introduced as a new item. After the testing scheme has been in operation for some time an equilibrium condition will obtain in which the probability that an item which is selected at random will be unfailed is constant. We wish to know the relation between this constant and the parameters of the test arrangements.

Since we start each use cycle with some number, M, of good units, the number of good units which have been used x times is given by the expression

$$U_0 M e^{-ax}$$

where U_0 is the fraction of new units which are good, M is the number of new units introduced each use cycle, and a is the failure rate per use cycle of the item. At the beginning of each use cycle, some units have not been used, some have been used once, some twice, and so on up to $(n_1 n_2 n_3 - 1)$. Items

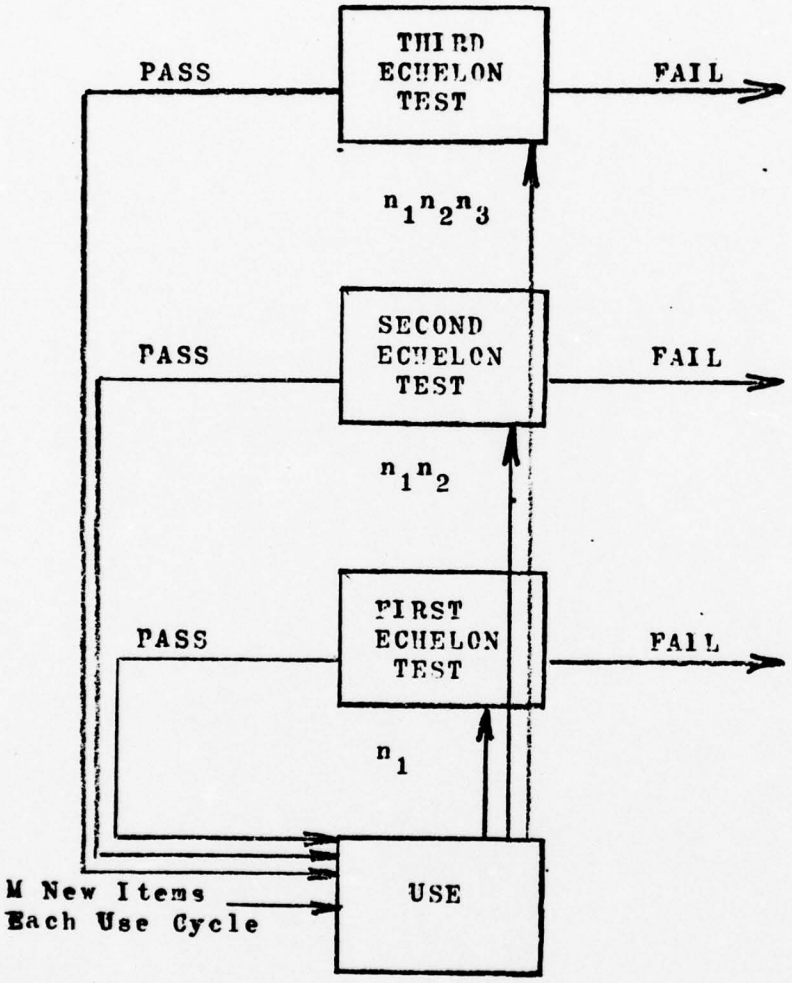


Figure 2

TESTING SCHEME

that have been used $n_1 n_2 n_3$ times are removed from service and tested on the third echelon tester. If they pass this test they will be returned to service. If they do not pass this test they will be replaced with units which are new or reworked. The new or reworked units will have been tested on the third echelon tester. If the probability that a unit which passes this test will really be good is U_0 then the number of units which are in service which are good will be given by

$$U = U_0 M + U_0 M e^{-a} + U_0 M e^{-2a} + \cdots + U_0 M e^{-a(n_1 n_2 n_3 - 1)}$$

$$= \sum_{0}^{n_1 n_2 n_3 - 1} U_0 M e^{-ax} = U_0 M \frac{1 - e^{-a n_1 n_2 n_3}}{1 - e^{-a}} \qquad \text{EQ 1}$$

Now, M is the number of new units, or units which have passed the third echelon test, which are introduced each use cycle. It is the sum of the number of units which fail the first and second echelon tests each use cycle plus the number of units which are tested on the third echelon test each use cycle. The number of units tested on the first echelon tester each use cycle is

$$\frac{N}{n_1}$$

where N is the total number of units.

Of these

$$\frac{N}{n_1}\left[1-e^{-a(1-FA_1)n_1}\right]$$

fail the test. FA_1 is the fraction of failed items which pass the first echelon test. The number of units which survive to be tested on the second echelon test the first time is

$$Me^{-a(1-FA_1)n_1n_2}$$

Of these

$$Me^{-a(1-FA_1)n_1n_2}\left[1-e^{-a(FA_1-FA_2)n_1n_2}\right]$$

fail the test. FA_2 is the fraction of failed items which pass the second echelon test. The number which do not fail will be

$$Me^{-a(1-FA_1)n_1n_2}e^{-a(FA_1-FA_2)n_1n_2} = Me^{-a(1-FA_2)n_1n_2}$$

Of these

$$Me^{-a(1-FA_2)n_1n_2}e^{-a(1-FA_1)n_1n_2}$$

survive to be tested on the second echelon tester the second time. Of these

$$Me^{-a(1-FA_1)n_1n_2}e^{-a(1-FA_2)n_1n_2}\left[1-e^{-a(FA_1-FA_2)n_1n_2}\right]$$

fail and

$$Me^{-a(1-FA_2)2n_1n_2}$$

survive. Extending this reasoning, one finds that the total number of items rejected each use cycle by the second echelon test is

$$Me^{-a(1-FA_1)n_1n_2}\sum_{x=0}^{x=n_3-1}e^{-a(1-FA_2)n_1n_2x}\left[1-e^{-a(FA_1-FA_2)n_1n_2}\right]$$

$$= M e^{-a(1-FA_1)n_1n_2} \frac{1-e^{-a(1-FA_2)n_1n_2n_3}}{1-e^{-a(1-FA_2)n_1n_2}} \left[1-e^{-a(FA_1-FA_2)n_1n_2}\right]$$

The number of items which survive to be tested on the third echelon tester is

$$M e^{-a(1-FA_2)n_1n_2n_3}$$

Therefore, the number of new units introduced each use cycle will be

$$M = \frac{N}{n_1}\left[1-e^{-a(1-FA_1)n_1}\right] \cdot$$

$$+ M e^{-a(1-FA_1)n_1n_2} \frac{1-e^{-a(1-FA_2)n_1n_2n_3}}{1-e^{-a(1-FA_2)n_1n_2}} \left[1-e^{-a(FA_1-FA_2)n_1n_2}\right]$$

$$+ M e^{-a(1-FA_2)n_1n_2n_3}$$

$$M = \frac{\frac{N}{n_1}\left[1-e^{-a(1-FA_1)n_1}\right]\left[1-e^{-a(1-FA_2)n_1n_2}\right]}{\left[1-e^{-a(1-FA_2)n_1n_2n_3}\right]\left[1-e^{-a(1-FA_1)n_1n_2}\right]}$$

By substitution we get the fraction of the items which are good at any time:

$$U = \frac{U_0 M}{N} \frac{1-e^{-a n_1n_2n_3}}{1-e^{-a}}$$

$$U = \frac{U_o \left[1 - e^{-a n_1 n_2 n_3}\right]\left[1 - e^{-a(1-FA_1) n_1}\right]\left[1 - e^{-a(1-FA_2) n_1 n_2}\right]}{n_1 \left[1 - e^{-a(1-FA_2) n_1 n_2 n_3}\right]\left[1 - e^{-a}\right]\left[1 - e^{-a(1-FA_1) n_1 n_2}\right]} \quad \text{EQ.2}$$

Normally, a test scheme will be designed to provide a U which is greater than or equal to some specified value. Obtaining greater values of U increases costs. Decreasing the false acceptance rates increases U and adds to the cost of the test equipment. Decreasing the values of the n's increases U and increases labor, shipping, and spares costs.

There is a selection of false acceptance rates and of test intervals, n's, which provides the required U at minimum cost. We must find this selection.

The number of tests which will be performed at each echelon each use cycle depends on the values of n_1, n_2, and n_3 and on the false acceptance rates. The number of items which will be tested at the first echelon each use cycle is

$$\frac{N}{n_1}$$

The number of units which will be tested at the second echelon for the first time is

$$M e^{-a(1-FA_1) n_1 n_2}$$

and for the second time is

$$M e^{-a(1-FA_1) 2 n_1 n_2} e^{-a(FA_1 - FA_2) n_1 n_2}$$

The total number of units tested at the second echelon will be

$$M e^{-a(1-FA_1) n_1 n_2} \frac{1 - e^{-a(1-FA_2) n_1 n_2 n_3}}{1 - e^{-a(1-FA_2) n_1 n_2}}$$

each use cycle. Now since

$$M = \frac{\frac{N}{n_1}\left[1 - e^{-a(1-FA_1) n_1}\right]\left[1 - e^{-a(1-FA_2) n_1 n_2}\right]}{\left[1 - e^{-a(1-FA_2) n_1 n_2 n_3}\right]\left[1 - e^{-a(1-FA_1) n_1 n_2}\right]}$$

this becomes

$$\frac{N}{n_1} \frac{e^{-a(1-FA_1) n_1 n_2}\left[1 - e^{-a(1-FA_1) n_1}\right]}{1 - e^{-a(1-FA_1) n_1 n_2}}$$

The number of items tested each use cycle at the third echelon will be

$$M e^{-a(1-FA_2)n_1n_2n_3}$$

$$= \frac{N}{n_1} \frac{e^{-a(1-FA_2)n_1n_2n_3}\left[1-e^{-a(1-FA_1)n_1}\right]\left[1-e^{-a(1-FA_2)n_1n_2}\right]}{\left[1-e^{-a(1-FA_2)n_1n_2n_3}\right]\left[1-e^{-a(1-FA_1)n_1n_2}\right]}$$

Now, let K_1 be the costs associated with performing tests on each unit at the first echelon, K_2 the cost at the second echelon, and K_3 the cost at the third echelon. The cost, K, of testing incurred each use cycle will be

$$K = K_1\frac{N}{n_1} + K_2\frac{N}{n_1}\frac{e^{-a(1-FA_1)n_1n_2}\left[1-e^{-a(1-FA_1)n_1}\right]}{1-e^{-a(1-FA_1)n_1n_2}}$$

$$+K_3\frac{N}{n_1}\frac{e^{-a(1-FA_2)n_1n_2n_3}\left[1-e^{-a(1-FA_1)n_1}\right]\left[1-e^{-a(1-FA_2)n_1n_2}\right]}{\left[1-e^{-a(1-FA_2)n_1n_2n_3}\right]\left[1-e^{-a(1-FA_1)n_1n_2}\right]}$$

This quantity times the total number of use cycles in the service life, when added to the cost of the test equipment, will be the total service life cost.

The cost of a test set to achieve the required false acceptance rate is determined as follows. A test set is required

which will detect all but FA of the failed items tested. We can choose the functions to be tested to minimize the cost. Let a_i be the failure rate of the ith function which the item performs. Let C_i be the cost of the equipment to test each of the m functions.

If there are a total of m_f functions which might be tested and if it costs C_m for the equipment to detect the failure of the mth function, the cost per fraction of failures detected will be

$$\frac{C_m}{1 - FA_m} = \frac{C_m}{a_m} \sum_{i=1}^{m_f} a_i = \frac{C_m a}{a_m}$$

where FA_m is the fraction of the failed items which will pass the test if the mth function is not tested and is given by

$$FA_m = 1 - \frac{a_m}{\sum_{i=1}^{m_f} a_i} = 1 - \frac{a_m}{a}$$

where a is the failure rate of the item.

If the functions are ordered according to increasing value of

$$\frac{C_m a}{a_m}$$

they will be in the order in which they should be chosen to obtain the required test set. The false acceptance rates of the first and second echelon testers are given by

$$FA_1 = 1 - \frac{\sum_{m=1}^{m_1} a_m}{a}$$

and

$$FA_2 = 1 - \frac{\sum_{m=1}^{m_2} a_m}{a}$$

where m_1 is the highest index of the functions tested at first echelon and m_2 is the highest index for second echelon. The false acceptance rate of the third echelon tester is

$$1 - U_0 = 1 - \frac{\sum_{m=1}^{m_c} a_m}{a}$$

The cost of the first echelon tester will be

$$(\text{Tester Cost})_1 = C_0 + \sum_{m=1}^{m_1} C_m$$

the cost of the second echelon tester will be

$$(\text{Tester Cost})_2 = C_0 + \sum_{m_1+1}^{m_2} C_m$$

and the cost of the third echelon tester will be

$$(\text{Tester Cost})_3 = C_0 + \sum_{m=m_2+1}^{m_3} C_m$$

where C_0 is the cost of the basic tester.

The cost of performing each test is the cost of the labor, the shipping to the test site, packing for shipping, the spares to replace the items while they are away for test, the test set maintenance, and the consumables associated with the test. These costs are given by

$$K_i = (\text{Test Time})_i (\text{Pay Rate})_i (\text{No. Men})_i + (\text{Ship Cost})_i$$
$$+ (\text{Pack. Cost})_i$$
$$+ (\text{Turnaround Time})_i (\text{Cost Item}) / (\text{Service Life})$$
$$+ (\text{Tester Repair Time})_i (\text{Test Time})_i (\text{Pay Rate})_i / (\text{MTBF Tester})$$
$$+ (\text{Test Time})_i (\text{Repair Material Ratio}) (\text{Tester Cost})_i / (\text{MTBF Tester})$$

where the subscript, i, indicates the echelon of the test.

Some of the quantities which depend on the echelon of test depend on what tests are performed and, through this dependence, on the false acceptance rate. These quantities are the test time, the test sets MTBR and MTBF, and the average

materials cost for repairing the test set. These quantities can be related to the functions which the test set tests. For example, it will take a particular time to test a particular function. Consequently, the quantities can be found as follows.

The test time is the sum of the test times for all of the functions tested at the particular echelon. If the test times for each function, T_m, have subscripts which are ordered according to increasing

$$\frac{C_m a}{a_m}$$

the test time for the first echelon test will be given by

$$(\text{Test Time})_1 = \sum_{m=0}^{m_1} T_m + T_0$$

where m_1 is the highest cost function tested by the first echelon and T_{01} is the time necessary for getting the item on and off the tester. The second echelon test time will be

$$(\text{Test Time})_2 = \sum_{m=m_1+1}^{m_2} T_m + T_0$$

and the third echelon test time will be

$$(\text{Test Time})_3 = \sum_{m=m_2+1}^{m_3} T_m + T_o$$

where m_2, m_3, T_{02} and T_{03} have meanings corresponding to the meanings of m_1 and T_{01}. The indicies follow the same rules for second and third echelon tests as for the test times.

If the A_m are the failure rates of the part of the tester that tests the mth function, the failure rate of the first echelon tester will be

$$(\text{MTBF TESTER})_1 = \frac{1}{A_o + \sum_{m=1}^{m_1} A_m}$$

the failure rate of the second echelon tester will be

$$(\text{MTBF Tester})_2 = \frac{1}{A_o + \sum_{m_1+1}^{m_2} A_m}$$

and the failure rate of the third echelon tester will be

$$(\text{MTBF Tester})_3 = \frac{1}{A_o + \sum_{m_2+1}^{m_3} A_m}$$

where A_0 is the failure rate of the basic test equipment comprising blowers, cables, racks, and any other equipment which is shared by the rest of the tester equipment.

If the A_m are the failure rates of the part of the tester which tests the mth function and the R_m are the repair times for each of these parts, the average time to repair the first echelon tester will be

$$\left(\text{Repair Time Of Tester}\right)_1 = \frac{A_0 R_0 + \sum_{m=1}^{m_1} A_m R_m}{\sum_{m=1}^{m_1} A_m}$$

the average time to repair the second echelon tester will be

$$\left(\text{Repair Time Of Tester}\right)_2 = \frac{A_0 R_0 + \sum_{m=m_1+1}^{m_2} A_m R_m}{\sum_{m=m_1+1}^{m_2} A_m}$$

and the average time to repair the third echelon tester will be

$$\left(\text{Repair Time Of Tester}\right)_3 = \frac{A_0 R_0 + \sum_{m=m_2+1}^{m_f} A_m R_m}{\sum_{m=m_2+1}^{m_f} A_m}$$

where A_0 is the failure rate of the basic test equipment and R_0 is its repair time.

COMPUTER PROGRAM

The program consists of a main program and five subroutines. The purpose of each is:

MAIN - controls program and reads input data

INPUTS - prints out the description and value of each data element.

COSTS - calculates, for each echelon, the costs of the test equipment and of performing a test on the item

CALC - calculates the total cost of testing the item over its service life.

XRTNI - solves equations used in subroutine CALC. XRTNI solves equations by using the Newton-Raphson iterative technique.

FCT - calculates values used by subroutine XRTNI

Table 1 gives the computer program. The program is in IBM FORTRAN IV (Extended).

Operation of the Model

Figure 3 is a flow chart of the program. Testing at either two or three echelons of test can be simulated. The program consists basically of four loops which are executed repeatedly. The first two loops allow the number of item functions tested by the first and second echelon testers to vary over their prescribed range. The remaining two loops allow the intervals between tests at the first and second echelons to vary over their prescribed range.

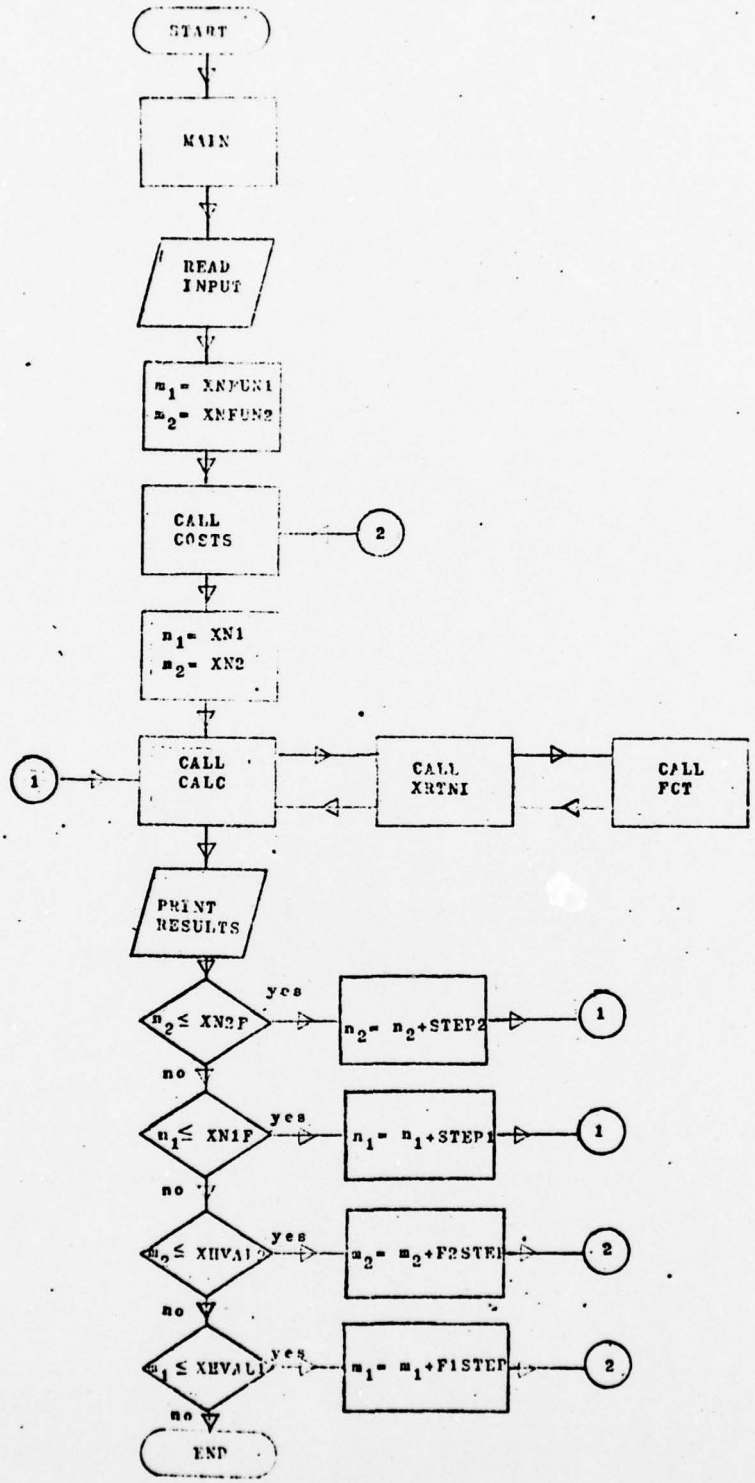


FIGURE 3

FLOW CHART FOR COMPUTER PROGRAM

Intervals between tests are measured in use cycles which is the number of times that the end item has been "used". For instance, a mission in which an aircraft takes off and lands with a particular missile constitutes one use cycle of that missile.

The purpose of subroutine COSTS is to calculate the cost of testing at the ith echelon (i=1,2, or 3) and to calculate the cost of the test equipment. Each cost depends only on the number of functions tested at that level. For example, suppose 15 functions are to be analyzed: the first 5 at echelon 1, the next 6 at echelon 2, and the remaining 4 at echelon 3. Subroutine COSTS would assign the cost of testing functions 1 through 5 to echelon 1, of testing function 6 through 11 to echelon 2, and of testing functions 11 through 15 to echelon 3. It does this by calculating the costs associated with testing at each of the three levels. Note that the cost of testing a function is charged to one level only.

Subroutine CALC calculates the number of use cycles that elapse between tests using EQ.2. This equation contains n_1 (number of cycles between first echelon tests), n_2 (number of n_1 cycles between second echelon tests), and n_3 (Number of n_2 cycles between third echelon tests), as variables. If only 2 testers are used the equation contains only n_1 and n_2.

For example if n_1=10, n_2=5, and n_3=2 first echelon tests are performed every n_1=10 cycles, second echelon tests every $n_1 X n_2$= 10X5=50 cycles, and third echelon tests every $n_1 X n_2 X n_3$ = 10X5X2=100 cycles.

Due to the complexity of the expression (Eq.2) it is solved for one unknown value at a time. That is, given n_1 and n_2 (or n_1 only), CALC will solve the expression for n_3 (or n_2). The equation is solved by using the Newton-Raphson method, which makes successively better approximations. Given a rough approximation to the true solution of the equation the Newton-Raphson method, after a number of iterations, finds a solution which is arbitrarily close to the true solution. This procedure is carried out in routines XRTNI and FCT.

After the value of n_3 (n_2 for the two echelon case) has been calculated, the total cost of testing at all echelons over the service life of the item is calculated by CALC. The results are printed. These results are printed for all values of n_1, n_2, m_1, and m_2 which lie in the ranges specified by the inputs. It is a simple matter to scan these results to find the combination which will give the lowest cost for the testing.

TABLE 2

COMPUTER PROGRAM

MEMBER NAME CALC

```
      SUBROUTINE CALC(YRPLC,COST,XNTSTR,TRCOST,USECYC,XST,IEND,          00001000
     *  XNFUNC,XNFUN1,XNFUN2,K,L)                                        00002000
C                                                                        00003000
C       PURPOSE: TO CALCULATE THE COST(CTEST) OF TESTING ALL THE         00004000
C       FUNCTIONS OF A GIVEN ITEM AND THE TOTAL COST(TLCOST) OF          00005000
C       TESTING THE ITEM OVER ITS LIFE CYCLE.  SUBROUTINE CALC CALLS     00006000
C       SUBROUTINE XRTNI AND IS CALLED BY MAIN.                          00007000
C                                                                        00008000
C       CTEST-COST OF TESTING ITEM ONE TIME                              00009000
C       FNDEF-FRACTION OF ITEMS IN USE WHICH ARE NOT DEFECTIVE           00010000
C       TLCOST-TOTAL COST OF TESTING ITEM OVER ITEM LIFE CYCLE           00011000
C       XIEND-MAXIMUM NUMBER OF ITERATIONS  NEWTON-RAPHSON METHOD        00012000
C            ALLOWED TO GO THROUGH                                       00013000
C       XIMTBF-ITEM FAILURE RATE                                         00014000
C       XNTSTR(I)-NUMBER OF TESTERS AT ITH ECHELON                       00015000
C       XST-INITIAL VALUE USED BY NEWTON-RAPHSON METHOD                  00016000
C                                                                        00017000
      COMMON/X/B(8)                                                      00018000
      DIMENSION TRCOST(3),XNTSTR(3),COST(3)                              00019000
      EQUIVALENCE (XIMTBF,B(1)),(XN1,B(2)),(XN2,B(3)),(FDEFF1,B(4)),     00020000
     *(FDEFF2,B(5)),(FDEFF3,B(6)),(FNDEF,B(7)),(XNITEM,B(8))             00021000
      EXTERNAL FCT                                                       00022000
      IFLAG = 2                                                          00022500
      AFUN1 = K                                                          00023000
      AFUN2 = L                                                          00024000
      IF(XNFUN2 .NE. XNFUNC) GO TO 4                                     00025000
C                                                                        00025050
C     INTERMEDIATE VALUES-TWO TESTER CASE                                00025100
      Z = XIMTBF * XN1                                                   00026000
      C = 1.0                                                            00027000
      E = 1.0                                                            00028000
      FDEFF3 = FDEFF2                                                    00029000
      GO TO 5                                                            00030000
C                                                                        00030500
C     INTERMEDIATE VALUES-THREE TESTER CASE                              00030600
    4 Z = XIMTBF* XN1 * XN2                                              00031000
      C = 1.0 - EXP(Z * (-1.0) * FDEFF1)                                 00032000
      E = 1.0 - EXP(Z * (-1.0) * FDEFF2)                                 00033000
    5 F = 1.0 - EXP(XIMTBF* (-1.0))                                      00034000
      D = 1.0 - EXP(XIMTBF* (-1.0) * XN1 * FDEFF1)                       00035000
C                                                                        00035050
C     CONST MUST BE >= 1, OTHERWISE THE VALUE RETURNED BY ROUTINE        00035100
C     XRTNI WILL BE NEGATIVE.  NEGATIVE XN2 OR XN3 VALUES HAVE NO        00035200
C     MEANINGFUL INTERPRETATION.                                         00035300
      CONST = FNDEF * (XN1/ FDEFF3) * F * C / (D * E)                    00036000
      IF(CONST .GE. 1.0) GO TO 20                                        00037000
      IF(XNFUN2 .EQ. XNFUNC) GO TO 21                                    00038000
      TEMP1 = COST(3)                                                    00039000
      COST(3) = 0.0                                                      00040000
      TEMP2 = TRCOST(3)                                                  00041000
      TRCOST(3) = 0.0                                                    00042000
      IFLAG = 1                                                          00043000
      GO TO 35                                                           00044000
   21 TEMP1 = COST(2)                                                    00045000
      COST(2) = 0.0                                                      00046000
```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```
      TEMP2 = TRCOST(2)                                                 00047000
      TRCOST(2) = 0.0                                                   00048000
      IFLAG = 1                                                         00049000
      GO TO 35                                                          00049500
C                                                                       00050000
   20 EPS = .001                                                        00051000
      CALL XRTNI(X,F,DERF,FCT,XST,EPS,IEND,IER,Z1,CONST,Z2,             00052000
     *  XNFUNC,XNFUN2)                                                 00053000
C                                                                       00053050
C     BRANCH TO APPROPRIATE MESSAGE IF NO VALUE RETURNED BY XRTNI       00053100
   25 GO TO (100,200),IER                                               00054000
      IF(Z1 .LT. 174. .AND. Z2 .LT. 174.) GO TO 35                      00055000
      IF(XNFUN2 .EQ. XNFUNC) GO TO 26                                   00056000
      WRITE(6,33) AFUN1,AFUN2,XN1,XN2,X                                 00057000
   33 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,F4.0,1X,'   *',4X,            00058000
     *'INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  00059000
     *VALUE',5X,F10.1)                                                  00060000
      GO TO 41                                                          00061000
   26 WRITE(6,34) AFUN1,AFUN2,XN1,X                                     00062000
   34 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,'   *',9X,'INITIAL X VALUE WIL00063000
     *L CAUSE EXPONENT OVERFLOW.  NEED NEW STARTING VALUE.',5X,F10.1)    00064000
   41 RETURN                                                            00065000
C                                                                       00066000
   35 T = XIMTBF * FDEFF1 * XN1                                         00067000
      IF(XNFUN2 .NE. XNFUNC) GO TO 45                                   00068000
C                                                                       00068050
C     INTERMEDIATE QUANTITIES-TWO TESTER CASE                           00068100
      S = 0.0                                                           00069000
      TRCOST(3) = 0.0                                                   00070000
      FDEFF3 = 0.0                                                      00071000
      X = 0.0                                                           00072000
      GO TO (44,47),IFLAG                                               00073000
   44    U= 0.0                                                         00073100
         W = 0.0                                                        00073200
         GO TO 48                                                       00073400
   47 U = XIMTBF * FDEFF2 * XN1 * XN2                                   00074000
      W = EXP((-1.0) * T * XN2)                                         00075000
      GO TO 48                                                          00076000
C                                                                       00076050
C     INTERMEDIATE QUANTITIES-THREE TESTER CASE                         00076100
   45 U = XIMTBF * FDEFF2 * XN1 * XN2                                   00077000
      W = EXP((-1.0) * T * XN2)                                         00078000
      GO TO (46,43),IFLAG                                               00078100
   46    S = 0.0                                                        00078200
         GO TO 48                                                       00078400
   43 S = EXP((-1.0) * U * X)                                           00079000
   48 V = 1.0 - EXP((-1.0) * T)                                         00080000
      Z = 1.0 - EXP((-1.0) * U)                                         00081000
      Y = XNITEM / XN1                                                  00082000
C                                                                       00082020
C     CALCULATE COST OF COMPLETELY TESTING ITEM ONE TIME                00082030
      CTEST = Y*(COST(1) +  COST(2) * V* W /(1.0-W)) + (COST(3)/(1.0-W))00083000
     *   * S * V * Y * Z / (1.0 - S)                                    00084000
C                                                                       00084050
C     CALCULATE COST OF TESTING ITEM OVER ITS LIFECYCLE                 00084100
```

```
      TLCOST = CTEST * YRPLC * USECYC +XNTSTR(1)*TRCOST(1) +          00085000
     *XNTSTR(2) * TRCOST(2) + XNTSTR(3) * TRCOST(3)                   00086000
C                                                                     00086100
      IF(XNFUN2 .EQ. XNFUNC) GO TO 70                                 00090010
         IF(IFLAG .NE. 2) GO TO 60                                    00090020
      GO TO 80                                                        00090030
   60 WRITE(6,65) AFUN1,AFUN2,XN1,XN2,FDEFF1,FDEFF2,FDEFF3,COST(1),   00090031
     *  COST(2),COST(3),CTEST,TLCOST                                 00090032
   65 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,F4.0,1X,'  I ',4X,          00090033
     * 3(F4.2,4X),1X,3(F8.0,4X),F9.0,5X,F10.0)                       00090034
         COST(3) = TEMP1                                              00090040
         TRCOST(3) = TEMP2                                            00090050
         RETURN                                                       00090060
   70 IF(IFLAG .NE. 2) GO TO 75                                       00090070
      GO TO 80                                                        00090080
   75 WRITE(6,77) AFUN1,AFUN2,XN1,X,FDEFF1,FDEFF2,FDEFF3,COST(1),     00090081
     *  COST(2),COST(3),CTEST,TLCOST                                 00090082
   77 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,'  I ',1X,F4.0,4X,          00090083
     * 3(F4.2,4X),1X,3(F8.0,4X),F9.0,5X,F10.0)                       00090084
      COST(2) = TEMP1                                                 00090090
      TRCOST(2) = TEMP2                                               00090100
      RETURN                                                          00091000
   80 WRITE(6,50)  AFUN1, AFUN2,XN1,XN2,X,FDEFF1,FDEFF2,FDEFF3,COST(1), 00091100
     * COST(2),COST(3),CTEST,TLCOST                                   00091200
   50 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,F4.0,1X,F4.0,4X,            00091300
     * 3(F4.2,4X),1X,3(F8.0,4X),F9.0,5X,F10.0)                       00091400
         RETURN                                                       00091500
C                                                                     00092000
  100 IF(XNFUN2 .EQ. XNFUNC) GO TO 110                                00093000
  101 WRITE(6,102) AFUN1,AFUN2,XN1,XN2,IEND                           00094000
  102 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,F4.0,1X,'   *',4X,          00095000
     * 'NO CONVERGENCE WITHIN ',I2,' ITERATIONS')                    00096000
      RETURN                                                          00097000
C                                                                     00098000
  110 WRITE(6,111) AFUN1,AFUN2,XN1,IEND                               00099000
  111 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,'   *',9X,                  00100000
     * 'NO CONVERGENCE WITHIN ',I2,' ITERATIONS')                    00101000
      RETURN                                                          00102000
C                                                                     00103000
  200 IF(XNFUN2 .EQ. XNFUNC) GO TO 210                                00104000
  201 WRITE(6,202) AFUN1,AFUN2,XN1,XN2                                00105000
  202 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,F4.0,1X,'   *',4X,          00106000
     * 'AT SOME ITERATION STEP DERIVATIVE IS ZERO')                  00107000
      RETURN                                                          00108000
C                                                                     00109000
  210 WRITE(6,211) AFUN1,AFUN2,XN1                                    00110000
  211 FORMAT(/,2X,F4.0,1X,F4.0,1X,F4.0,1X,'   *',9X,                  00111000
     * 'AT SOME ITERATION STEP DERIVATIVE IS ZERO')                  00112000
      RETURN                                                          00113000
      END                                                             00114000
```

MEMBER NAME COSTS

```
      SUBROUTINE COSTS(K,L,FDEFF1,FDEFF2,FDEFF3,COST,XNFUNC,          00001000
     * RPMATR,TRCOST)                                                 00002000
C                                                                     00003000
C        PURPOSE: TO CALCULATE THE COST OF PERFORMING A TEST ON THE   00004000
C        ITEM AT THE ITH ECHELON(I=1,2,OR3).  THE TEST COST AT A GIVEN00005000
C        ECHELON DEPENDS ON THE NUMBER OF FUNCTIONS OF THE ITEM       00006000
C        THAT ARE CHECKED AT THAT ECHELON.                            00007000
C                                                                     00008000
C        CITEM-COST OF ITEM                                           00009000
C        COST(I)-COST OF PERFORMING TEST AT ITH ECHELON(I=1,2,3)      00010000
C        CPACK(I)-COST OF PACKING TO SHIP ITEM TO ITH ECHELON         00011000
C        CSHIP(I)-COST OF SHIPPING ITEM TO ITH ECHELON                00012000
C        ECOSTS(I)-COST OF EQUIPMENT TO REPAIR ITH FUNCTION           00013000
C        EFAILR(I)-FAILURE RATE OF EQUIPMENT TO REPAIR ITH FUNCTION   00014000
C        FDEFF1-PER CENT OF DEFECTIVE ITEMS FAILING FIRST ECHELON TEST00015000
C        FDEFF2-PER CENT OF DEFECTIVE ITEMS FAILING SECOND ECHELON TEST00016000
C        FDEFF3-PER CENT OF DEFECTIVE ITEMS FAILING THIRD ECHELON TEST00017000
C        PAYR(I)-PAY RATE AT ITH ECHELON(I=1,2,3)                     00018000
C        RPMATR-REPAIR MATERIAL RATIO                                 00019000
C        RTIMES(I)-TIME REQD TO REPAIR EQUIP. TESTING ITH FUNCTION    00020000
C        TRCOST-COST OF ITH ECHELON TESTER                            00021000
C        TTIMES(I)-TIME REQ'D TO TEST THE ITH FUNCTION OF ITEM        00022000
C        TURNT(I)-TURNAROUND TIME FOR ITEM AT ITH ECHELON             00023000
C        USECYC-NUMBER OF USE CYCLES                                  00024000
C        YRPLC-YEARS PER ITEM LIFECYCLE                               00025000
C        XIFAIR(I)-FAILURE RATE OF ITH FUNCTION OF ITEM               00026000
C        XMEN(I)-MEN REQ'D TO OPERATE ITH ECHELON TESTER              00027000
C                                                                     00028000
      COMMON/M/A(3,11),B(21,5)                                        00029000
      DIMENSION PAYR(3),XNMEN(3),CSHIP(3),CPACK(3),TURNT(3),XNTSTR(3) 00030000
      DIMENSION TESTT(3),XREPRT(3),TRCOST(3),XTRMTB(3),TRMTBF(3),     00031000
     *REPRT(3),COST(3),SUM(3)                                         00032000
      DIMENSION RTIMES(21),ECOSTS(21),EFAILR(21),XIFAIR(21),TTIMES(21) 00033000
      EQUIVALENCE (PAYR(1),A(1,1)),(XNMEN(1),A(1,2)),(CSHIP(1),A(1,3)), 00034000
     *(CPACK(1),A(1,4)),(TURNT(1),A(1,5)),(XNTSTR(1),A(1,6)),         00035000
     *  (CITEM,A(1,11)),(YRPLC,A(2,11))                               00036000
      EQUIVALENCE (RTIMES(1),B(1,1)),(ECOSTS(1),B(1,2)),              00037000
     *            (EFAILR(1),B(1,3)),(XIFAIR(1),B(1,4)),              00038000
     *            (TTIMES(1),B(1,5))                                  00039000
      N1 = XNFUNC                                                     00040000
      KK = K                                                          00041000
      I=1                                                             00042000
      M=1                                                             00043000
      N = XNFUNC + 1.0                                                00044000
C                                                                     00045000
C        SUM,TESTT,XREPRT,TRCOST,XTRMTB ACCUMULATE TOTALS FOR EACH    00046000
C        ECHELON TESTER DEPENDING ON THE NUMBER OF FUNCTIONS TESTED   00047000
C        AT THAT LEVEL.  COST(I),I=1,2,3 IS THEN COMPUTED USING THESE 00048000
C        QUANTITIES.                                                  00049000
C                                                                     00050000
   40 SUM(I)=0.0                                                      00051000
        TESTT(I) = TTIMES(N)                                          00052000
        XREPRT(I)= EFAILR(N) * RTIMES(N)                              00053000
        TRCOST(I) = ECOSTS(N)                                         00054000
        XTRMTB(I)= EFAILR(N)                                          00055000
```

MEMBER NAME COSTS (CONT)

```
     45 DO 50 J=M,KK                                                          00056000
          SUM(I) = SUM(I) + EFAILR(J)                                         00057000
          TESTT(I) = TESTT(I) + TTIMES(J)                                     00058000
          XREPRT(I)= XREPRT(I) + EFAILR(J) * RTIMES(J)                        00059000
          TRCOST(I)= TRCOST(I) + ECOSTS(J)                                    00060000
          XTRMTB(I)= XTRMTB(I) + EFAILR(J)                                    00061000
     50 CONTINUE                                                              00062000
        IF(I .GT. 1) GO TO 55                                                 00063000
        I=I+1                                                                 00064000
        M=1 + KK                                                              00065000
        KK = L                                                                00066000
        GO TO 40                                                              00067000
     55 IF(N1 .NE. L) GO TO 60                                                00068000
        J = 2                                                                 00069000
        COST(3) = 0.0                                                         00070000
        GO TO 70                                                              00071000
     60 IF(I - 3 .EQ. 0) GO TO 65                                             00072000
        I = I + 1                                                             00073000
        M = L + 1                                                             00074000
        KK = N1                                                               00075000
        GO TO 40                                                              00076000
     65 J = 3                                                                 00077000
     70 DO 75 I=1,J                                                           00078000
          TRMTBF(I) = 1.0/ XTRMTB(I)                                          00079000
          REPRT(I) = XREPRT(I) / SUM(I)                                       00080000
          COST(I) = TESTT(I) * PAYR(I) * XNMEN(I) + CSHIP(I) + CPACK(I)       00081000
       * + TURNT(I) * CITEM/YRPLC + (REPRT(I) * TESTT(I) * PAYR(I)            00082000
       * + TESTT(I) * RPMATR * TRCOST(I)) / TRMTBF(I)                         00083000
     75 CONTINUE                                                              00084000
        SUM1=0.0                                                              00085000
        SUM2=0.0                                                              00086000
        SUM3=0.0                                                              00087000
        DO 85 I=1,K                                                           00088000
        SUM1 = SUM1 + XIFAIR(I)                                               00089000
     85 CONTINUE                                                              00090000
        DO 90 I=1,L                                                           00091000
        SUM2 = SUM2 + XIFAIR(I)                                               00092000
     90 CONTINUE                                                              00093000
        IF(N1 .EQ. L) GO TO 100                                               00094000
        DO 95 I=1,N1                                                          00095000
        SUM3 = SUM3 + XIFAIR(I)                                               00096000
     95 CONTINUE                                                              00097000
        GO TO 105                                                             00098000
    100 SUM3 = 0.0                                                            00099000
    105 FDEFF1 =   SUM1 / XIFAIR(N)                                           00100000
        FDEFF2 =   SUM2 / XIFAIR(N)                                           00101000
        FDEFF3 =   SUM3 / XIFAIR(N)                                           00102000
        RETURN                                                                00103000
        END                                                                   00104000
```

MEMBER NAME FCT

```
      SUBROUTINE FCT(TOL,F,DERF,Z1,CONST,Z2,XNFUNC,XNFUN2)                00001000
C                                                                         00002000
C        PURPOSE: TO CALCULATE VALUES USED BY SUBROUTINE XRTNI.           00003000
C        THE EQUATIONS WHICH ARE USED DEPEND ON THE NUMBER(2 OR 3)        00004000
C        OF ECHELON LEVELS AT WHICH TESTING OCCURS.  FCT IS CALLED        00005000
C        BY SUBROUTINE XRTNI.                                             00006000
C        SPECIFICALLY,FCT EVALUATES THE FUNCTION AND ITS DERIVATIVE       00007000
C     SINCE BOTH IF THESE VALUES ARE REQUIRED FOR EACH ITERATION OF       00007100
C     THE NEWTON-RAPHSON METHOD IN SUBROUTINE XRTNI                       00007200
C                                                                         00007300
      COMMON/X/A(8)                                                       00008000
      EQUIVALENCE (ALPHA,A(1)),(XN1,A(2)),(XN2,A(3)),(FDEFF1,A(4)),       00009000
     *(FDEFF2,A(5)),(FDEFF3,A(6)),(FNDEF,A(7)),(XNITEM,A(8))              00010000
      IF(XNFUN2 .EQ. XNFUNC) GO TO 5                                      00011000
      GO TO 6                                                             00012000
C                                                                         00012050
C     TWO TESTER CASE-CHECK SIZE OF EXPONENTS OCCURING IN EQUATIONS.      00012100
C     IF X>174, EXP(X) WILL CAUSE OVERFLOW AND ERROR MESSAGE.             00012200
    5 Z = ALPHA * XN1                                                     00013000
      Z1 = Z * (-1.0) * TOL                                               00014000
      Z2 = Z1 * (FDEFF1 + FDEFF2)                                         00015000
      GO TO 7                                                             00016000
C                                                                         00016050
C     THREE TESTER CASE-EXPONENT CHECK SIMILIAR TO TWO TESTER CASE        00016100
    6 Z = ALPHA * XN1 * XN2                                               00017000
      Z1 = Z * (-1.0) * TOL                                               00018000
      Z2 = Z1 * (1.0 + FDEFF2)                                            00019000
    7 IF(Z1 .LT. 174. .AND. Z2 .LT. 174.) GO TO 10                        00020000
      RETURN                                                              00021000
   10 T = EXP(Z * (-1.0) * TOL)                                           00022000
      IF(XNFUN2 .EQ. XNFUNC) GO TO 23                                     00023000
C                                                                         00023050
C     EVALUATE DERIVATIVE OF FUNCTION F-THREE TESTER CASE                 00023100
      S = 1.0 - EXP(Z * (-1.0) * FDEFF2 * TOL)                            00024000
   20 R = 1.0 - EXP(Z * (-1.0) * TOL)                                     00025000
      DERF = (Z*T*S - R*Z*FDEFF2*T**FDEFF2) / (S*S)                       00026000
      GO TO 25                                                            00027000
C                                                                         00027050
C     EVALUATE DERIVATIVE OF FUNCTION F-TWO TESTER CASE                   00027100
   23 R = 1.0 - EXP(Z * (-1.0) * FDEFF2 * TOL)                            00028000
      S = 1.0 - EXP(Z * (-1.0) * FDEFF1 * TOL)                            00029000
      DERF =(S * Z * FDEFF2 * T ** FDEFF2 - R * Z * FDEFF1*T ** FDEFF1)   00030000
     *  /(S * S)                                                         00031000
C                                                                         00031050
C     EVALUATE FUNCTION F                                                 00031100
   25 F = (R/S) - CONST                                                   00032000
      RETURN                                                              00033000
      END                                                                 00034000
```

```
MEMBER NAME INPUTS

      SUBROUTINE INPUTS(XNFUNC,FNDEF,RPMATR,USECYC,XST,XIEND)                00001000
C                                                                            00002000
C        PURPOSE: TO DESCRIBE EACH INPUT DATA ELEMENT                        00003000
C                                                                            00004000
      COMMON/M/A(3,11),B(21,5)                                               00005000
      WRITE(6,10)                                                            00006000
   10 FORMAT(////,50X,'INPUT DATA DESCRIPTION'//)                            00007000
      WRITE(6,20)((A(I,J),I=1,3),J=1,11)                                     00008000
   20 FORMAT(10X,'PAY RATE($/HR) AT TESTER',20X,3(F6.2,11X),/,               00009000
     *       10X,'NO. MEN TO OPERATE TESTER',19X,3(F6.2,11X),/,              00010000
     *       10X'COST OF SHIPPING TO TESTER',16X,3(F8.2,9X),/,               00011000
     *       10X,'COST OF PACKING TO SHIP TO TESTER',9X,3(F8.2,9X),/,        00012000
     *       10X,'TURNAROUND TIME(YRS) TO TEST ITEM',11X,3(F6.2,11X),/,      00013000
     *       10X,'NUMBER OF TESTERS',27X,3(F6.2,11X),///,                    00014000
     *       10X,'NO. TESTER1 FUNCTIONS(INITIAL VALUE',10X,3(F3.0,14X),      00015000
     *     /,13X,'FINAL VALUE,INCREMENT)',//,                                00016000
     *       10X,'NO. TESTER2 FUNCTIONS(INITIAL VALUE',10X,3(F3.0,14X),      00017000
     *     /,13X,'FINAL VALUE,INCREMENT)',//,                                00018000
     *       10X,'NO. CYCLES BETWEEN FIRST ECHELON TESTS',7X,                00019000
     *       3(F3.0,14X),/,13X,'(INITIAL VALUE,FINAL VALUE,INCREMENT)',      00020000
     *       //,10X,'NO. X(CYCLES BETWEEN FIRST ECHELON TESTS)',4X,          00021000
     *       3(F3.0,14X),/,13X,'CYCLES BETWEEN SECOND ECHELON TESTS',/,      00022000
     *       13X,'(INITIAL VALUE,FINAL VALUE,INCREMENT)',//,                 00023000
     *       10X,'ITEM COST,ITEM LIFECYCLE,NO. OF ITEMS',4X,F9.0,12X,        00024000
     *       F3.0,14X,F4.0,//)                                               00025000
      WRITE(6,22) XNFUNC,FNDEF,RPMATR,USECYC,XST,XIEND                       00026000
   22 FORMAT(10X,'NO. ITEM FUNCTIONS TESTED',20X,F3.0,//,                    00027000
     *       10X,'FRACTION OF ITEMS IN USE NOT DEFECTIVE',8X,F4.2,//,        00028000
     *       10X,'REPAIR MATERIAL RATIO',24X,F5.2,//,                        00029000
     *       10X,'NO. USE CYCLES',29X,F5.0,//,                               00030000
     *       10X,'INITIAL VALVE FOR NEWTON-RAPHSON METHOD',6X,F3.0,//,       00031000
     *       10X,'MAXIMUM NO. ITERATIONS FOR N-R METHOD',8X,F3.0,////)       00032000
      NN=XNFUNC + 1.0                                                        00033000
   30 WRITE(6,31) (B(I,1),I=1,NN)                                            00034000
   31 FORMAT(10X,'TIME REQD TO REPAIR EQUIP. WHICH TESTS ITH FUNCTION',      00035000
     *       6(T57,4(F15.6,3X)/))                                            00036000
   40 WRITE(6,41) (B(I,2),I=1,NN)                                            00037000
   41 FORMAT(10X,'COST OF EQUIPMENT TO TEST ITH FUNCTION',                   00038000
     *       6(T57,4(F15.6,3X)/))                                            00039000
   50 WRITE(6,51) (B(I,3),I=1,NN)                                            00040000
   51 FORMAT(10X,'FAILURE RATE OF EQUIP. TO TEST ITH FUNCTION',              00041000
     *       6(T57,4(F15.6,3X)/))                                            00042000
   60 WRITE(6,61) (B(I,4),I=1,NN)                                            00043000
   61 FORMAT(10X,'FAILURE RATE OF ITH FUNCTION OF ITEM',                     00044000
     *       6(T57,4(F15.6,3X)/))                                            00045000
   70 WRITE(6,71) (B(I,5),I=1,NN)                                            00046000
   71 FORMAT (10X,'TIME REQD TO TEST ITH FUNCTION',                          00047000
     *       6(T57,4(F15.6,3X)/))                                            00048000
      RETURN                                                                 00049000
      END                                                                    00050000
```

```
MEMBER NAME MAIN

C         PURPOSE: READ INPUT DATA AND CONTROL PROGRAM. THE FOLLOWING     00001000
C         PROGRAM CALCULATES THE LIFE CYCLE COST OF PERIODICALLY          00002000
C         TESTING SPECIFIC MISSILE FUNCTIONS. TESTING IS ASSUMED TO       00003000
C         OCCUR AT EITHER 2 OR 3 ECHELON LEVELS. THE PROGRAM ESSENTIALLY  00004000
C         CONSISTS OF FOUR LOOPS-THE FIRST 2 ALLOW THE NUMBER OF          00005000
C         FUNCTIONS TESTED TO VARY OVER A PRESCRIBED RANGE AND THE        00006000
C         REMAINING 2 ALLOW THE TIME INTERVAL BETWEEN TESTS TO VARY OVER  00007000
C         A PRESCRIBED RANGE.                                             00008000
C                                                                         00009000
C         F1STEP-STEPSIZE FOR XNFUN1                                      00010000
C         F2STEP-STEPSIZE FOR XNFUN2                                      00011000
C         STEP1-XN1 STEPSIZE                                              00012000
C         STEP2-XN2 STEPSIZE                                              00013000
C         XHVAL1-FINAL XNFUN1 VALUE                                       00014000
C         XHVAL2-FINAL XNFUN2 VALUE                                       00015000
C         XN1-NO. CYCLES BETWEEN FIRST ECHELON TESTS                      00016000
C         XN1F-FINAL XN1 VALUE                                            00017000
C         XN2-NO. XN1 CYCLES BETWEEN SECOND ECHELON TESTS                 00018000
C         XN2F-FINAL XN2 VALUE                                            00019000
C         XNFUN1-NO. FUNCTIONS TESTED BY FIRST ECHELON(INITIAL VALUE)     00020000
C         XNFUN2-NO. FUNCTIONS TESTED BY SECOND ECHELON(INITIAL)          00021000
C         XNFUNC-NO. OF ITEM FUNCTIONS TESTED                             00022000
C                                                                         00023000
C                                                                         00024000
      COMMON/M/A(3,11),B(21,5)                                            00025000
      COMMON/X/C(8)                                                       00026000
      DIMENSION COST(3),XNTSTR(3),TRCOST(3)                               00027000
      EQUIVALENCE (XNFUN1,A(1,7)),(XHVAL1,A(2,7)),(F1STEP,A(3,7)),        00028000
     *            (XNFUN2,A(1,8)),(XHVAL2,A(2,8)),(F2STEP,A(3,8)),        00029000
     *            (XN1,A(1,9)),(XN1F,A(2,9)),(STEP1,A(3,9)),              00030000
     *            (XN2,A(1,10)),(XN2F,A(2,10)),(STEP2,A(3,10)),           00031000
     *            (XNITEM,A(3,11)),(XNTSTR(1),A(1,6)),(YRPLC,A(2,11))     00032000
      WRITE(6,1)                                                          00033000
    1 FORMAT(' LIST OF INPUT DATA'/)                                      00034000
   10 FORMAT(T21,3F10.2)                                                  00035000
   11 FORMAT(T21,3(F10.2,1X))                                             00036000
   15 FORMAT(T21,F10.2)                                                   00037000
C     READ AND WRITE INPUT DATA                                           00038000
      DO 5 J=1,11                                                         00039000
      READ(5,10) (A(I,J),I=1,3)                                           00040000
      WRITE(6,11) (A(I,J),I=1,3)                                          00041000
    5 CONTINUE                                                            00042000
      READ(5,15)  XNFUNC,FNDEF,RPMATR,USECYC,XST,XIEND                    00043000
      WRITE(6,15) XNFUNC,FNDEF,RPMATR,USECYC,XST,XIEND                    00044000
      IEND = XIEND                                                        00045000
      NN=XNFUNC + 1.0                                                     00046000
      DO 40 J=1,5                                                         00047000
      READ(5,100,END=250) (B(I,J),I=1,NN)                                 00048000
      WRITE(6,100) (B(I,J),I=1,NN)                                        00049000
   40 CONTINUE                                                            00050000
  100 FORMAT(T21,4F15.6)                                                  00051000
      CALL INPUTS(XNFUNC,FNDEF,RPMATR,USECYC,XST,XIEND)                   00052000
      C(1) = B(NN,4)                                                      00053000
      C(7) = FNDEF                                                        00054000
      C(8) = XNITEM                                                       00055000
```

```
      NFUN1 = XNFUN1                                                    00056000
      NFUN2 = XNFUN2                                                    00057000
      IVAL1 = XHVAL1                                                    00058000
      IVAL2 = XHVAL2                                                    00059000
      NSTEP1 = F1STEP                                                   00060000
      NSTEP2 = F2STEP                                                   00061000
      N1 = XN1                                                          00062000
      N2 = XN2                                                          00063000
      N1F = XN1F                                                        00064000
      N2F = XN2F                                                        00065000
      ISTEP1= STEP1                                                     00066000
      ISTEP2 = STEP2                                                    00067000
      WRITE(6,200)                                                      00068000
  200 FORMAT(/////,56X,'TEST COST SUMMARY',                             00069000
     * //,2X,'FUNCTIONS',5X,'CYCLES',7X,'DEFECTIVE ITEMS FAILING',     00070000
     * 5X,'TEST1',7X,'TEST2',7X,'TEST3',5X,'COMPLETE',6X,              00071000
     * 'LIFE CYCLE',/,3X,'M1',3X,'M2',3X,'N1',3X,'N2',3X,'N3',5X,      00072000
     * ' TEST1',2X,' TEST2',2X,' TEST3',5X,'COST',8X,'COST',8X,'COST',  00073000
     * 6X,'TEST COST',8X,'COST'//)                                     00074000
C                                                                       00075000
C     LOOP ON FUNCTIONS TESTED BY FIRST ECHELON TESTER                  00076000
C                                                                       00077000
      DO 1000 K=NFUN1,IVAL1,NSTEP1                                      00078000
      IF(XNFUN2 .NE. XNFUNC) GO TO 150                                  00079000
      IVAL2 = NFUN2                                                     00080000
C                                                                       00081000
C     LOOP ON FUNCTIONS TESTED BY SECOND ECHELON TESTER                 00082000
C                                                                       00083000
  150 DO 2000 L=NFUN2,IVAL2,NSTEP2                                      00084000
      IF(L .LE. K) GO TO 2000                                           00085000
      CALL COSTS(K,L,FDEFF1,FDEFF2,FDEFF3,COST,XNFUNC,RPMATR,TRCOST)    00086000
      C(4) = FDEFF1                                                     00087000
      C(5) = FDEFF2                                                     00088000
      C(6) = FDEFF3                                                     00089000
C                                                                       00090000
C     LOOP ON CYCLES BETWEEN FIRST ECHELON TESTS                        00091000
C                                                                       00092000
      DO 600 I=N1,N1F,ISTEP1                                            00093000
      XN1 = I                                                           00094000
      C(2) = XN1                                                        00095000
      IF(XNFUN2 .NE. XNFUNC) GO TO 220                                  00096000
      N2F = N2                                                          00097000
C                                                                       00098000
C     LOOP ON CYCLES BETWEEN SECOND ECHELON TESTS                       00099000
C                                                                       00100000
  220 DO 800 J=N2,N2F,ISTEP2                                            00101000
      XN2 = J                                                           00102000
      C(3) = XN2                                                        00103000
      CALL CALC(YRPLC,COST,XNTSTR,TRCOST,USECYC,XST,IEND,XNFUNC,        00104000
     *  XNFUN1,XNFUN2,K,L)                                              00105000
  800 CONTINUE                                                          00106000
  600 CONTINUE                                                          00107000
 2000 CONTINUE                                                          00108000
 1000 CONTINUE                                                          00109000
  250 STOP                                                              00110000
```

MEMBER NAME MAIN (CONT)

```
      END                                                          00111000
```

042

MEMBER NAME XRTNI

```
      SUBROUTINE XRTNI(X,F,DERF,FCT,XST,EPS,IEND,IER,Z1,CONST,Z2,        00001000
     *  XNFUNC,XNFUN2)                                                   00002000
C                                                                       00003000
C        PURPOSE: TO CALCULATE THE VALUE OF X USING THE NEWTON-         00004000
C.       RAPHSON TECHNIQUE.  WHEN TESTING IS PERFORMED AT TWO           00005000
C        ECHELONS ONLY, X REPRESENTS THE NUMBER OF XN1 CYCLES           00006000
C        BETWEEN SECOND ECHELON TESTS.  WHEN THREE TYPES OF TESTERS     00007000
C        ARE USED,X REPRESENTS THE NUMBER OF XN2 CYCLES BETWEEN         00008000
C        THIRD ECHELON TESTS.  XRTNI CALLS SUBROUTINE FCT.  THERE ARE   00009000
C        THREE CASES IN WHICH AN X VALUE IS NOT RETURNED.               00010000
C          1) IER=1.  NO CONVERGENCE IN IEND ITERATION STEPS.           00011000
C          2) IER=2.  DIVISION BY ZERO.                                 00012000
C          3) INITIAL VALUE CAUSES OVERFLOW IN CALCULATIONS INVOLVING   00013000
C             EXPONENTIALS.                                             00014000
C        XRTNI CALLS FCT AND IS CALLED BY SUBROUTINE CALC.              00015000
C                                                                       00016000
C     PREPARE ITERATION                                                 00017000
      IER = 0                                                           00018000
      X = XST                                                           00019000
      TOL = X                                                           00020000
      CALL FCT(TOL,F,DERF,Z1,CONST,Z2,XNFUNC,XNFUN2)                    00021000
      TOLF = 100. * EPS                                                 00022000
C     START ITERATION LOOP                                              00023000
      DO 6 I=1,IEND                                                     00024000
      IF(F)1,7,1                                                        00025000
C     EQUATION IS NOT SATISFIED BY X                                    00026000
    1 IF(DERF)2,8,2                                                     00027000
    2 IF(ABS(DERF) - 16.0 ** (-60.0))8,22,22                            00028000
C     ITERATION IS POSSIBLE                                             00029000
   22 DX = F / DERF                                                     00030000
      X = X - DX                                                        00031000
      TOL = X                                                           00032000
      IF(ABS(TOL) .GT. .1) GO TO 12                                     00033000
      X = 1.0                                                           00034000
      RETURN                                                            00035000
   12 CALL FCT(TOL,F,DERF,Z1,CONST,Z2,XNFUNC,XNFUN2)                    00036000
C     TEST ON SATISFACTORY ACCURACY                                     00037000
      IF(Z1 .LT. 174. .AND. Z2 .LT. 174.) GO TO 10                      00038000
      RETURN                                                            00039000
   10 TOL = EPS                                                         00040000
      A = ABS(X)                                                        00041000
      IF(A - 1.)4,4,3                                                   00042000
    3 TOL = TOL * A                                                     00043000
    4 IF(ABS(DX) - TOL)5,5,6                                            00044000
    5 IF(ABS(F) - TOLF)7,7,6                                            00045000
    6 CONTINUE                                                          00046000
C     END OF ITERATION LOOP                                             00047000
C     NO CONVERGENCE AFTER IEND ITERATION STEPS. ERROR RETURN.          00048000
      IER = 1                                                           00049000
    7 RETURN                                                            00050000
C     ERROR RETURN IN CASE OF ZERO DIVISOR                              00051000
    8 IER = 2                                                           00052000
      RETURN                                                            00053000
      END                                                               00054000
```

LIST OF INPUT DATA

TABLE 3

EXAMPLE RESULTS 1

```
      7.00        12.00        15.50
      2.00         2.00         2.00
     10.00       500.00      1000.00
       0.0        10.00        10.00
      0.01         0.10         0.75
     20.00         2.00         1.00
      1.00        10.00         1.00
      2.00        11.00         2.00
      1.00         5.00         2.00
      2.00        18.00         2.00
  50000.00        10.00       500.00
     12.00
      0.70
      0.15
     20.00
      7.00
     20.00
        1.000000         1.000000         1.500000         1.500000
        1.500000         1.500000         1.500000         1.500000
        2.000000         2.000000         2.000000         2.000000
        1.000000
    20000.000000     20000.000000     28000.000000     40000.000000
    40000.000000     89400.000000     40000.000000     80000.000000
   100000.000000    600000.000000    100000.000000    100000.000000
    20000.000000
        0.001020         0.000660         0.000550         0.001060
        0.000500         0.000280         0.000210         0.000450
        0.000120         0.000120         0.000010         0.000130
        0.001000
        0.001000         0.000900         0.001180         0.001260
        0.000700         0.001540         0.000670         0.000120
        0.001470         0.008570         0.001390         0.001350
        0.020150
        0.300000         0.300000         0.300000         0.300000
        0.500000         0.300000         0.300000         0.300000
        0.300000         1.000000         1.000000         2.000000
        0.200000
```

INPUT DATA DESCRIPTION

PAY RATE($/HR) AT TESTER	7.00	12.00	15.50
NO. MEN TO OPERATE TESTER	2.00	2.00	2.00
COST OF SHIPPING TO TESTER	10.00	500.00	1000.00
COST OF PACKING TO SHIP TO TESTER	0.0	10.00	10.00
TURNAROUND TIME(YRS) TO TEST ITEM	0.01	0.10	0.75
NUMBER OF TESTERS	20.00	2.00	1.00
NO. TESTER1 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	1.	10.	1.
NO. TESTER2 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	2.	11.	2.
NO. CYCLES BETWEEN FIRST ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)	1.	5.	2.

NO. X(CYCLES BETWEEN FIRST ECHELON TESTS) 2. 18. 2.

CYCLES BETWEEN SECOND ECHELON TESTS
(INITIAL VALUE,FINAL VALUE,INCREMENT)

ITEM COST,ITEM LIFECYCLE,NO. OF ITEMS 50000. 10. 500.

10 years
20/year
200
500
20) 10 0 0 0 0
5 0 0 0
1 0 0 0
5,0 0 0,0 0 0
2 5 0 0
2 0 0
1 0 0 0
20,0 0 0

NO. ITEM FUNCTIONS TESTED 12.

FRACTION OF ITEMS IN USE NOT DEFECTIVE 0.70

REPAIR MATERIAL RATIO 0.15

NO. USE CYCLES 20.

INITIAL VALVE FOR NEWTON-RAPHSON METHOD 7.

MAXIMUM NO. ITERATIONS FOR N-R METHOD 20.

TIME REQD TO REPAIR EQUIP. WHICH TESTS ITH FUN	1.000000	1.000000	1.500000	1.500000
	1.500000	1.500000	1.500000	1.500000
	2.000000	2.000000	2.000000	2.000000
	1.000000			
COST OF EQUIPMENT TO TEST ITH FUNCTION	20000.000000	20000.000000	28000.000000	40000.000000
	40000.000000	89400.000000	40000.000000	80000.000000
	100000.000000	600000.000000	100000.000000	100000.000000
	20000.000000			
FAILURE RATE OF EQUIP. TO TEST ITH FUNCTION	0.001020	0.000660	0.000550	0.001060
	0.000500	0.000280	0.000210	0.000450
	0.000120	0.000120	0.000010	0.000130
	0.001000			
FAILURE RATE OF ITH FUNCTION OF ITEM	0.001000	0.000900	0.001180	0.001260
	0.000700	0.001540	0.000670	0.000120
	0.001470	0.008570	0.001390	0.001350
	0.020150			
TIME REQD TO TEST ITH FUNCTION	0.300000	0.300000	0.300000	0.300000
	0.500000	0.300000	0.300000	0.300000
	0.300000	1.000000	1.000000	2.000000
	0.200000			

TEST COST SUMMARY

FUNCTIONS M1	FUNCTIONS M2	CYCLES N1	CYCLES N2	CYCLES N3	DEFECTIVE ITEMS FAILING TEST1	TEST2	TEST3	TEST1 COST K_1	TEST2 COST K_2	TEST3 COST K_3	COMPLETE TEST COST use cycle K	~~LIFE CYCLE~~ Service Life COST
1.	2.	1.	2.	22.	0.05	0.09	1.00	73.	1027.	10307.	406416.	83400592.
1.	2.	1.	4.	11.	0.05	0.09	1.00	73.	1027.	10307.	278320.	57781280.
1.	2.	1.	6.	7.	0.05	0.09	1.00	73.	1027.	10307.	235766.	49270512.
1.	2.	1.	8.	5.	0.05	0.09	1.00	73.	1027.	10307.	214598.	45037008.
1.	2.	1.	10.	4.	0.05	0.09	1.00	73.	1027.	10307.	201986.	42514608.
1.	2.	1.	12.	4.	0.05	0.09	1.00	73.	1027.	10307.	193653.	40847888.

1.	2.	1.	14.	3.	0.05	0.09	1.00	73.	1027.	10307.	187763.	39669984.
1.	2.	1.	16.	3.	0.05	0.09	1.00	73.	1027.	10307.	183402.	38797744.
1.	2.	1.	18.	2.	0.05	0.09	1.00	73.	1027.	10307.	180061.	38129488.
1.	2.	3.	2.	7.	0.05	0.09	1.00	73.	1027.	10307.	211568.	44430912.
1.	2.	3.	4.	4.	0.05	0.09	1.00	73.	1027.	10307.	169502.	36017728.
1.	2.	3.	6.	2.	0.05	0.09	1.00	73.	1027.	10307.	155929.	33303088.
1.	2.	3.	8.	2.	0.05	0.09	1.00	73.	1027.	10307.	149485.	32014400.
1.	2.	3.	10.	1.	0.05	0.09	1.00	73.	1027.	10307.	145899.	31297168.
1.	2.	3.	12.	1.	0.05	0.09	1.00	73.	1027.	10307.	143745.	30866320.
1.	2.	3.	14.	1.	0.05	0.09	1.00	73.	1027.	10307.	139645.	30046320.
1.	2.	3.	16.	1.	0.05	0.09	1.00	73.	1027.	10307.	141600.	30437280.
1.	2.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	5.	2.	4.	0.05	0.09	1.00	73.	1027.	10307.	173148.	36747040.
1.	2.	5.	4.	2.	0.05	0.09	1.00	73.	1027.	10307.	148660.	31849424.
1.	2.	5.	6.	1.	0.05	0.09	1.00	73.	1027.	10307.	141268.	30370928.
1.	2.	5.	8.	1.	0.05	0.09	1.00	73.	1027.	10307.	138169.	29751184.
1.	2.	5.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	5.	16.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	5.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	1.	2.	26.	0.05	0.22	1.00	73.	1095.	7862.	378098.	77805072.
1.	4.	1.	4.	13.	0.05	0.22	1.00	73.	1095.	7862.	241889.	50563088.
1.	4.	1.	6.	8.	0.05	0.22	1.00	73.	1095.	7862.	196872.	41559792.
1.	4.	1.	8.	6.	0.05	0.22	1.00	73.	1095.	7862.	174660.	37117360.
1.	4.	1.	10.	5.	0.05	0.22	1.00	73.	1095.	7862.	161577.	34500688.
1.	4.	1.	12.	4.	0.05	0.22	1.00	73.	1095.	7862.	153062.	32797712.
1.	4.	1.	14.	3.	0.05	0.22	1.00	73.	1095.	7862.	147163.	31617920.
1.	4.	1.	16.	3.	0.05	0.22	1.00	73.	1095.	7862.	142902.	30765840.
1.	4.	1.	18.	3.	0.05	0.22	1.00	73.	1095.	7862.	139738.	30132960.
1.	4.	3.	2.	8.	0.05	0.22	1.00	73.	1095.	7862.	172599.	36705152.
1.	4.	3.	4.	4.	0.05	0.22	1.00	73.	1095.	7862.	128845.	27954368.
1.	4.	3.	6.	3.	0.05	0.22	1.00	73.	1095.	7862.	115548.	25294912.

1.	4.	3.	8.	2.	0.05	0.22	1.00	73.	1095.	7862.	109941.	24173488. ← h_2
1.	4.	3.	10.	1.	0.05	0.22	1.00	73.	1095.	7862.	146720.	31529328.
1.	4.	3.	12.	1.	0.05	0.22	1.00	73.	1095.	7862.	106650.	23515344.
1.	4.	3.	14.	1.	0.05	0.22	1.00	73.	1095.	7862.	106818.	23548912.
1.	4.	3.	16.	1.	0.05	0.22	1.00	73.	1095.	7862.	107667.	23718848.
1.	4.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	5.	2.	5.	0.05	0.22	1.00	73.	1095.	7862.	132603.	28705888.
1.	4.	5.	4.	2.	0.05	0.22	1.00	73.	1095.	7862.	108461.	23877600.
1.	4.	5.	6.	1.	0.05	0.22	1.00	73.	1095.	7862.	141715.	30528352.
1.	4.	5.	8.	1.	0.05	0.22	1.00	73.	1095.	7862.	104752.	23135792.
1.	4.	5.	10.	1.	0.05	0.22	1.00	73.	1095.	7862.	82673.	18720064. ← h_2 ← $h_{ml}(1,4)$
1.	4.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	5.	16.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-84.6
1.	6.	1.	2.	31.	0.05	0.33	1.00	73.	1330.	6542.	411411.	84596960.
1.	6.	1.	4.	15.	0.05	0.33	1.00	73.	1330.	6542.	245991.	51512912.
1.	6.	1.	6.	10.	0.05	0.33	1.00	73.	1330.	6542.	191349.	40584656.
1.	6.	1.	8.	7.	0.05	0.33	1.00	73.	1330.	6542.	164418.	35198336.
1.	6.	1.	10.	6.	0.05	0.33	1.00	73.	1330.	6542.	148583.	32031360.
1.	6.	1.	12.	5.	0.05	0.33	1.00	73.	1330.	6542.	138307.	29976240.
1.	6.	1.	14.	4.	0.05	0.33	1.00	73.	1330.	6542.	131219.	28558640.
1.	6.	1.	16.	3.	0.05	0.33	1.00	73.	1330.	6542.	126133.	27541328.
1.	6.	1.	18.	3.	0.05	0.33	1.00	73.	1330.	6542.	122390.	26792720. ← h_2 ☆ x
1.	6.	3.	2.	10.	0.05	0.33	1.00	73.	1330.	6542.	167017.	35718128.
1.	6.	3.	4.	5.	0.05	0.33	1.00	73.	1330.	6542.	114044.	25123520.
1.	6.	3.	6.	3.	0.05	0.33	1.00	73.	1330.	6542.	98160.	21946736.
1.	6.	3.	8.	2.	0.05	0.33	1.00	73.	1330.	6542.	91735.	20661696.
1.	6.	3.	10.	2.	0.05	0.33	1.00	73.	1330.	6542.	89274.	20169632.
1.	6.	3.	12.	1.	0.05	0.33	1.00	73.	1330.	6542.	88981.	20111024. ← h_2
1.	6.	3.	14.	1.	0.05	0.33	1.00	73.	1330.	6542.	90124.	20339616.
1.	6.	3.	16.	1.	0.05	0.33	1.00	73.	1330.	6542.	92380.	20790864.
1.	6.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

1.	6.	5.	2.	6.	0.05	0.33	1.00	73.	1330.	6542.	119510.	26216720.
1.	6.	5.	4.	3.	0.05	0.33	1.00	73.	1330.	6542.	90639.	20442512.
1.	6.	5.	6.	2.	0.05	0.33	1.00	73.	1330.	6542.	84580.	19230688.
1.	6.	5.	8.	1.	0.05	0.33	1.00	73.	1330.	6542.	84962.	19307168.
1.	6.	5.	10.	1.	0.05	0.33	1.00	73.	1330.	6542.	68385.	15991862. ← n_2 ← $\min(1,6)$
1.	6.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	6.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	6.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-108.5
1.	6.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-166.6
1.	8.	1.	2.	33.	0.05	0.37	1.00	73.	1701.	5757.	494773.	101389472.
1.	8.	1.	4.	16.	0.05	0.37	1.00	73.	1701.	5757.	282889.	59012640.
1.	8.	1.	6.	11.	0.05	0.37	1.00	73.	1701.	5757.	212747.	44984160.
1.	8.	1.	8.	8.	0.05	0.37	1.00	73.	1701.	5757.	178056.	38046048.
1.	8.	1.	10.	6.	0.05	0.37	1.00	73.	1701.	5757.	157561.	33946960.
1.	8.	1.	12.	5.	0.05	0.37	1.00	73.	1701.	5757.	144175.	31269856.
1.	8.	1.	14.	4.	0.05	0.37	1.00	73.	1701.	5757.	134865.	29407696.
1.	8.	1.	16.	4.	0.05	0.37	1.00	73.	1701.	5757.	128111.	28057072.
1.	8.	1.	18.	3.	0.05	0.37	1.00	73.	1701.	5757.	123074.	27049552. ← n_1 ★
1.	8.	3.	2.	11.	0.05	0.37	1.00	73.	1701.	5757.	188363.	40107360.
1.	8.	3.	4.	5.	0.05	0.37	1.00	73.	1701.	5757.	119876.	26409920.
1.	8.	3.	6.	3.	0.05	0.37	1.00	73.	1701.	5757.	98813.	22197424.
1.	8.	3.	8.	2.	0.05	0.37	1.00	73.	1701.	5757.	89823.	20399440.
1.	8.	3.	10.	2.	0.05	0.37	1.00	73.	1701.	5757.	85880.	19610816.
1.	8.	3.	12.	1.	0.05	0.37	1.00	73.	1701.	5757.	84691.	19372960. ← n_1
1.	8.	3.	14.	1.	0.05	0.37	1.00	73.	1701.	5757.	85331.	19501056.
1.	8.	3.	16.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	8.	5.	2.	6.	0.05	0.37	1.00	73.	1701.	5757.	128410.	28116816.
1.	8.	5.	4.	3.	0.05	0.37	1.00	73.	1701.	5757.	90231.	20481040.
1.	8.	5.	6.	2.	0.05	0.37	1.00	73.	1701.	5757.	81161.	18666912.
1.	8.	5.	8.	1.	0.05	0.37	1.00	73.	1701.	5757.	80279.	18490672. ← n_2 ←
1.	8.	5.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

1.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-135.8	
1.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-219.8	
1.	10.	1.	2.	I	0.05	0.86	1.00	73.	4085.	0.	1056269.	214168592.
1.	10.	1.	4.	I	0.05	0.86	1.00	73.	4085.	0.	545894.	112093520.
1.	10.	1.	6.	I	0.05	0.86	1.00	73.	4085.	0.	375769.	78068560.
1.	10.	1.	8.	I	0.05	0.86	1.00	73.	4085.	0.	290707.	61056192.
1.	10.	1.	10.	I	0.05	0.86	1.00	73.	4085.	0.	239669.	50848608.
1.	10.	1.	12.	I	0.05	0.86	1.00	73.	4085.	0.	205645.	44043696.
1.	10.	1.	14.	I	0.05	0.86	1.00	73.	4085.	0.	181341.	39182992.
1.	10.	1.	16.	I	0.05	0.86	1.00	73.	4085.	0.	163114.	35537520.
1.	10.	1.	18.	I	0.05	0.86	1.00	73.	4085.	0.	148937.	32702112. ← h_1 ☆
1.	10.	3.	2.	I	0.05	0.86	1.00	73.	4085.	0.	351067.	73128208.
1.	10.	3.	4.	I	0.05	0.86	1.00	73.	4085.	0.	181115.	39137840.
1.	10.	3.	6.	I	0.05	0.86	1.00	73.	4085.	0.	124465.	27807728.
1.	10.	3.	8.	I	0.05	0.86	1.00	73.	4085.	0.	96140.	22142800.
1.	10.	3.	10.	6.	0.05	0.86	1.00	73.	4085.	4980.	80499.	19234640.
1.	10.	3.	12.	2.	0.05	0.86	1.00	73.	4085.	4980.	77660.	18666736. ← h_2
1.	10.	3.	14.	1.	0.05	0.86	1.00	73.	4085.	4980.	97098.	22554336.
1.	10.	3.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-112.0	
1.	10.	3.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-259.7	
1.	10.	5.	2.	I	0.05	0.86	1.00	73.	4085.	0.	210033.	44921312.
1.	10.	5.	4.	I	0.05	0.86	1.00	73.	4085.	0.	108163.	24547408.
1.	10.	5.	6.	6.	0.05	0.86	1.00	73.	4085.	4980.	75672.	18269136. ← h_3 ≤
1.	10.	5.	8.	1.	0.05	0.86	1.00	73.	4085.	4980.	81490.	19432832.
1.	10.	5.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-150.6	
1.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-574.5	
1.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-2039.5	
1.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-7077.1	
1.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-24356.5	
2.	4.	1.	2.	26.	0.09	0.22	1.00	91.	1057.	7862.	376919.	77929248.
2.	4.	1.	4.	13.	0.09	0.22	1.00	91.	1057.	7862.	245356.	51616544.
2.	4.	1.	6.	8.	0.09	0.22	1.00	91.	1057.	7862.	201781.	42901504.

2.	4.	1.	8.	6.	0.09	0.22	1.00	91.	1057.	7862.	180206.	38586512.
2.	4.	1.	10.	5.	0.09	0.22	1.00	91.	1057.	7862.	167434.	36032080.
2.	4.	1.	12.	4.	0.09	0.22	1.00	91.	1057.	7862.	159065.	34358304.
2.	4.	1.	14.	3.	0.09	0.22	1.00	91.	1057.	7862.	153215.	33188464.
2.	4.	1.	16.	3.	0.09	0.22	1.00	91.	1057.	7862.	148942.	32333744.
2.	4.	1.	18.	3.	0.09	0.22	1.00	91.	1057.	7862.	145721.	31689488.
2.	4.	3.	2.	8.	0.09	0.22	1.00	91.	1057.	7862.	171769.	36899200.
2.	4.	3.	4.	4.	0.09	0.22	1.00	91.	1057.	7862.	129150.	28375280.
2.	4.	3.	6.	3.	0.09	0.22	1.00	91.	1057.	7862.	115847.	25714752.
2.	4.	3.	8.	2.	0.09	0.22	1.00	91.	1057.	7862.	109908.	24526944.
2.	4.	3.	10.	2.	0.09	0.22	1.00	91.	1057.	7862.	106945.	23934432.
2.	4.	3.	12.	1.	0.09	0.22	1.00	91.	1057.	7862.	105498.	23644880.
2.	4.	3.	14.	1.	0.09	0.22	1.00	91.	1057.	7862.	108059.	24157200.
2.	4.	3.	16.	1.	0.09	0.22	1.00	91.	1057.	7862.	94945.	21534464.
2.	4.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	5.	2.	5.	0.09	0.22	1.00	91.	1057.	7862.	131704.	28886224.
2.	4.	5.	4.	2.	0.09	0.22	1.00	91.	1057.	7862.	107654.	24076224.
2.	4.	5.	6.	2.	0.09	0.22	1.00	91.	1057.	7862.	101269.	22799104.
2.	4.	5.	8.	1.	0.09	0.22	1.00	91.	1057.	7862.	99411.	22427552.
2.	4.	5.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	5.	16.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-79.9
2.	6.	1.	2.	31.	0.09	0.33	1.00	91.	1225.	6542.	393607.	81396096.
2.	6.	1.	4.	15.	0.09	0.33	1.00	91.	1225.	6542.	241179.	50910560.
2.	6.	1.	6.	10.	0.09	0.33	1.00	91.	1225.	6542.	190783.	40831440.
2.	6.	1.	8.	7.	0.09	0.33	1.00	91.	1225.	6542.	165906.	35855920.
2.	6.	1.	10.	6.	0.09	0.33	1.00	91.	1225.	6542.	151243.	32923456.
2.	6.	1.	12.	5.	0.09	0.33	1.00	91.	1225.	6542.	141696.	31013952.
2.	6.	1.	14.	4.	0.09	0.33	1.00	91.	1225.	6542.	135078.	29690448.
2.	6.	1.	16.	3.	0.09	0.33	1.00	91.	1225.	6542.	130298.	28734320.
2.	6.	1.	18.	3.	0.09	0.33	1.00	91.	1225.	6542.	126747.	28024240.

2.	6.	3.	4.	5.	0.09	0.33	1.00	91.	1225.	6542.	111700.	25014848.
2.	6.	3.	6.	3.	0.09	0.33	1.00	91.	1225.	6542.	96805.	22035872.
2.	6.	3.	8.	2.	0.09	0.33	1.00	91.	1225.	6542.	90547.	20784112.
2.	6.	3.	10.	2.	0.09	0.33	1.00	91.	1225.	6542.	87852.	20245200.
2.	6.	3.	12.	1.	0.09	0.33	1.00	91.	1225.	6542.	105445.	23763760.
2.	6.	3.	14.	1.	0.09	0.33	1.00	91.	1225.	6542.	90346.	20743936.
2.	6.	3.	16.	1.	0.09	0.33	1.00	91.	1225.	6542.	88667.	20408272. ← h_1
2.	6.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	5.	2.	6.	0.09	0.33	1.00	91.	1225.	6542.	115342.	25743248.
2.	6.	5.	4.	1.	0.09	0.33	1.00	91.	1225.	6542.	184389.	39552528.
2.	6.	5.	6.	2.	0.09	0.33	1.00	91.	1225.	6542.	82133.	19101344.
2.	6.	5.	8.	1.	0.09	0.33	1.00	91.	1225.	6542.	81542.	18983136. ← h_1 ∈
2.	6.	5.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-102.4
2.	6.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-156.4
2.	8.	1.	2.	33.	0.09	0.37	1.00	91.	1514.	5757.	456113.	94017408.
2.	8.	1.	4.	16.	0.09	0.37	1.00	91.	1514.	5757.	267649.	56324656.
2.	8.	1.	6.	11.	0.09	0.37	1.00	91.	1514.	5757.	205240.	43842848.
2.	8.	1.	8.	8.	0.09	0.37	1.00	91.	1514.	5757.	174357.	37666160.
2.	8.	1.	10.	6.	0.09	0.37	1.00	91.	1514.	5757.	156093.	34013376.
2.	8.	1.	12.	5.	0.09	0.37	1.00	91.	1514.	5757.	144148.	31624288.
2.	8.	1.	14.	4.	0.09	0.37	1.00	91.	1514.	5757.	135821.	29958928.
2.	8.	1.	16.	4.	0.09	0.37	1.00	91.	1514.	5757.	129763.	28747392.
2.	8.	1.	18.	3.	0.09	0.37	1.00	91.	1514.	5757.	125225.	27839712. ← h_2 ✱
2.	8.	3.	2.	11.	0.09	0.37	1.00	91.	1514.	5757.	175047.	37804208.
2.	8.	3.	4.	5.	0.09	0.37	1.00	91.	1514.	5757.	114092.	25613232.
2.	8.	3.	6.	3.	0.09	0.37	1.00	91.	1514.	5757.	95231.	21841024.
2.	8.	3.	8.	2.	0.09	0.37	1.00	91.	1514.	5757.	87036.	20202032.
2.	8.	3.	10.	2.	0.09	0.37	1.00	91.	1514.	5757.	83246.	19444032.
2.	8.	3.	12.	1.	0.09	0.37	1.00	91.	1514.	5757.	98609.	22516672.

2.	8.	3.	14.	1.	0.09	0.37	1.00	91.	1514.	5757.	84525.	19699760.
2.	8.	3.	16.	1.	0.09	0.37	1.00	91.	1514.	5757.	74029.	17600656. ← h.
2.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	5.	2.	6.	0.09	0.37	1.00	91.	1514.	5757.	120063.	26807408.
2.	8.	5.	4.	3.	0.09	0.37	1.00	91.	1514.	5757.	85944.	19983600.
2.	8.	5.	6.	2.	0.09	0.37	1.00	91.	1514.	5757.	77484.	18291584.
2.	8.	5.	8.	1.	0.09	0.37	1.00	91.	1514.	5757.	76001.	17994992. ← h.
2.	8.	5.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-127.8
2.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-205.8
2.	10.	1.	2.	I	0.09	0.86	1.00	91.	3431.	0.	900515.	183377712.
2.	10.	1.	4.	I	0.09	0.86	1.00	91.	3431.	0.	472074.	97689488.
2.	10.	1.	6.	I	0.09	0.86	1.00	91.	3431.	0.	329260.	69126880.
2.	10.	1.	8.	I	0.09	0.86	1.00	91.	3431.	0.	257855.	54845808.
2.	10.	1.	10.	I	0.09	0.86	1.00	91.	3431.	0.	215012.	46277200.
2.	10.	1.	12.	I	0.09	0.86	1.00	91.	3431.	0.	186451.	40564960.
2.	10.	1.	14.	I	0.09	0.86	1.00	91.	3431.	0.	166050.	36484800.
2.	10.	1.	16.	I	0.09	0.86	1.00	91.	3431.	0.	150750.	33424688.
2.	10.	1.	18.	I	0.09	0.86	1.00	91.	3431.	0.	138849.	31044672. ← h. ☆
2.	10.	3.	2.	I	0.09	0.86	1.00	91.	3431.	0.	298552.	62985200.
2.	10.	3.	4.	I	0.09	0.86	1.00	91.	3431.	0.	156012.	34477088.
2.	10.	3.	6.	I	0.09	0.86	1.00	91.	3431.	0.	108500.	24974752.
2.	10.	3.	8.	I	0.09	0.86	1.00	91.	3431.	0.	84746.	20223936.
2.	10.	3.	10.	10.	0.09	0.86	1.00	91.	3431.	4980.	70732.	17641184.
2.	10.	3.	12.	3.	0.09	0.86	1.00	91.	3431.	4980.	67034.	16901536. ← h.
2.	10.	3.	14.	1.	0.09	0.86	1.00	91.	3431.	4980.	75698.	18634384.
2.	10.	3.	16.	0.	0.09	0.86	1.00	91.	3431.	4980.	147963.	33087408.
2.	10.	3.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-224.6
2.	10.	5.	2.	I	0.09	0.86	1.00	91.	3431.	0.	178163.	38907456.
2.	10.	5.	4.	I	0.09	0.86	1.00	91.	3431.	0.	92804.	21005680.
2.	10.	5.	6.	9.	0.09	0.86	1.00	91.	3431.	4980.	64738.	16442393. ← h.

2.	10.	5.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-129.5
2.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-506.1
2.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1812.8
2.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-6313.4
2.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-21752.7
3.	4.	1.	2.	26.	0.15	0.22	1.00	122.	1031.	7862.	385914.	80232272.
3.	4.	1.	4.	13.	0.15	0.22	1.00	122.	1031.	7862.	257413.	54531984.
3.	4.	1.	6.	8.	0.15	0.22	1.00	122.	1031.	7862.	214721.	45993648.
3.	4.	1.	8.	6.	0.15	0.22	1.00	122.	1031.	7862.	193483.	41745920.
3.	4.	1.	10.	5.	0.15	0.22	1.00	122.	1031.	7862.	180826.	39214544.
3.	4.	1.	12.	4.	0.15	0.22	1.00	122.	1031.	7862.	172460.	37541408.
3.	4.	1.	14.	4.	0.15	0.22	1.00	122.	1031.	7862.	166548.	36358880.
3.	4.	1.	16.	3.	0.15	0.22	1.00	122.	1031.	7862.	162167.	35482848.
3.	4.	1.	18.	3.	0.15	0.22	1.00	122.	1031.	7862.	158810.	34811392. ← ★
3.	4.	3.	2.	8.	0.15	0.22	1.00	122.	1031.	7862.	174207.	37890720.
3.	4.	3.	4.	4.	0.15	0.22	1.00	122.	1031.	7862.	132088.	29466960.
3.	4.	3.	6.	3.	0.15	0.22	1.00	122.	1031.	7862.	118493.	26747904.
3.	4.	3.	8.	1.	0.15	0.22	1.00	122.	1031.	7862.	193400.	41729360.
3.	4.	3.	10.	2.	0.15	0.22	1.00	122.	1031.	7862.	108436.	24736640. ← h_2
3.	4.	3.	12.	1.	0.15	0.22	1.00	122.	1031.	7862.	132089.	29467248. ?
3.	4.	3.	14.	1.	0.15	0.22	1.00	122.	1031.	7862.	104932.	24035824.
3.	4.	3.	16.	1.	0.15	0.22	1.00	122.	1031.	7862.	104110.	23871392.
3.	4.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	4.	5.	2.	5.	0.15	0.22	1.00	122.	1031.	7862.	132654.	29580160.
3.	4.	5.	4.	2.	0.15	0.22	1.00	122.	1031.	7862.	108191.	24687600.
3.	4.	5.	6.	2.	0.15	0.22	1.00	122.	1031.	7862.	100809.	23211264.
3.	4.	5.	8.	1.	0.15	0.22	1.00	122.	1031.	7862.	97717.	22592736.
3.	4.	5.	10.	1.	0.15	0.22	1.00	122.	1031.	7862.	96355.	22320416. ← h_1
3.	4.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	4.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	4.	5.	16.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	4.	5.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

3.	6.	1.	2.	31.	0.15	0.33	1.00	122.	1146.	6542.	389187.	81016096.
3.	6.	1.	4.	15.	0.15	0.33	1.00	122.	1146.	6542.	246583.	52495312.
3.	6.	1.	6.	10.	0.15	0.33	1.00	122.	1146.	6542.	199353.	43049296.
3.	6.	1.	8.	7.	0.15	0.33	1.00	122.	1146.	6542.	175971.	38373008.
3.	6.	1.	10.	6.	0.15	0.33	1.00	122.	1146.	6542.	162133.	35605392.
3.	6.	1.	12.	5.	0.15	0.33	1.00	122.	1146.	6542.	153070.	33792848.
3.	6.	1.	14.	4.	0.15	0.33	1.00	122.	1146.	6542.	146740.	32526720.
3.	6.	1.	16.	4.	0.15	0.33	1.00	122.	1146.	6542.	142119.	31602592.
3.	6.	1.	18.	3.	0.15	0.33	1.00	122.	1146.	6542.	138641.	30907072. ← n_1 ✗
3.	6.	3.	2.	10.	0.15	0.33	1.00	122.	1146.	6542.	158691.	34916896.
3.	6.	3.	4.	5.	0.15	0.33	1.00	122.	1146.	6542.	112577.	25694256.
3.	6.	3.	6.	3.	0.15	0.33	1.00	122.	1146.	6542.	98222.	22823200.
3.	6.	3.	8.	2.	0.15	0.33	1.00	122.	1146.	6542.	91861.	21550976.
3.	6.	3.	10.	2.	0.15	0.33	1.00	122.	1146.	6542.	88747.	20928096.
3.	6.	3.	12.	1.	0.15	0.33	1.00	122.	1146.	6542.	87301.	20638912.
3.	6.	3.	14.	1.	0.15	0.33	1.00	122.	1146.	6542.	86851.	20549008. ← n_1
3.	6.	3.	16.	1.	0.15	0.33	1.00	122.	1146.	6542.	87067.	20592160.
3.	6.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	5.	2.	6.	0.15	0.33	1.00	122.	1146.	6542.	113704.	25919552.
3.	6.	5.	4.	3.	0.15	0.33	1.00	122.	1146.	6542.	87796.	20737920.
3.	6.	5.	6.	2.	0.15	0.33	1.00	122.	1146.	6542.	81055.	19389760.
3.	6.	5.	8.	1.	0.15	0.33	1.00	122.	1146.	6542.	91880.	21554704.
3.	6.	5.	10.	1.	0.15	0.33	1.00	122.	1146.	6542.	73159.	17810608. ← n_1 ∈
3.	6.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-94.7
3.	6.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-143.8
3.	8.	1.	2.	33.	0.15	0.37	1.00	122.	1364.	5757.	434076.	90114032.
3.	8.	1.	4.	16.	0.15	0.37	1.00	122.	1364.	5757.	264258.	56150432.
3.	8.	1.	6.	11.	0.15	0.37	1.00	122.	1364.	5757.	207971.	44892912.
3.	8.	1.	8.	8.	0.15	0.37	1.00	122.	1364.	5757.	180072.	39313232.
3.	8.	1.	10.	6.	0.15	0.37	1.00	122.	1364.	5757.	163535.	36005792.
3.	8.	1.	12.	5.	0.15	0.37	1.00	122.	1364.	5757.	152683.	33835408.

3.	8.	1.	14.	4.	0.15	0.37	1.00	122.	1364.	5757.	145084.	32315600.
3.	8.	1.	16.	4.	0.15	0.37	1.00	122.	1364.	5757.	139522.	31203168.
3.	8.	1.	18.	3.	0.15	0.37	1.00	122.	1364.	5757.	135322.	30363088. ← h. ☆
3.	8.	3.	2.	11.	0.15	0.37	1.00	122.	1364.	5757.	167194.	36737552.
3.	8.	3.	4.	5.	0.15	0.37	1.00	122.	1364.	5757.	112104.	25719616.
3.	8.	3.	6.	3.	0.15	0.37	1.00	122.	1364.	5757.	94827.	22264192.
3.	8.	3.	8.	2.	0.15	0.37	1.00	122.	1364.	5757.	87078.	20714304.
3.	8.	3.	10.	2.	0.15	0.37	1.00	122.	1364.	5757.	83208.	19940432.
3.	8.	3.	12.	1.	0.15	0.37	1.00	122.	1364.	5757.	81344.	19567600.
3.	8.	3.	14.	1.	0.15	0.37	1.00	122.	1364.	5757.	80691.	19436896.
3.	8.	3.	16.	1.	0.15	0.37	1.00	122.	1364.	5757.	78597.	19018112. ← h.
3.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	8.	5.	2.	6.	0.15	0.37	1.00	122.	1364.	5757.	114921.	26283008.
3.	8.	5.	4.	3.	0.15	0.37	1.00	122.	1364.	5757.	83761.	20051024.
3.	8.	5.	6.	2.	0.15	0.37	1.00	122.	1364.	5757.	75454.	18389632. ← h. ←
3.	8.	5.	8.	1.	0.15	0.37	1.00	122.	1364.	5757.	84658.	20230320.
3.	8.	5.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-117.8
3.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-188.5
3.	10.	1.	2.	I	0.15	0.86	1.00	122.	2899.	0.	782609.	160300640.
3.	10.	1.	4.	I	0.15	0.86	1.00	122.	2899.	0.	420779.	87934512.
3.	10.	1.	6.	I	0.15	0.86	1.00	122.	2899.	0.	300170.	63812752.
3.	10.	1.	8.	I	0.15	0.86	1.00	122.	2899.	0.	239866.	51752016.
3.	10.	1.	10.	I	0.15	0.86	1.00	122.	2899.	0.	203685.	44515808.
3.	10.	1.	12.	I	0.15	0.86	1.00	122.	2899.	0.	179565.	39691840.
3.	10.	1.	14.	I	0.15	0.86	1.00	122.	2899.	0.	162337.	36246256.
3.	10.	1.	16.	I	0.15	0.86	1.00	122.	2899.	0.	149417.	33662192.
3.	10.	1.	18.	I	0.15	0.86	1.00	122.	2899.	0.	139368.	31652448. ← h. ☆
3.	10.	3.	2.	I	0.15	0.86	1.00	122.	2899.	0.	258657.	55510160.
3.	10.	3.	4.	I	0.15	0.86	1.00	122.	2899.	0.	138422.	31463248.
3.	10.	3.	6.	I	0.15	0.86	1.00	122.	2899.	0.	98349.	23448560.

3.	10.	3.	8.	I	0.15	0.86	1.00	122.	2899.	0.	78316.	19441888.
3.	10.	3.	10.	I	0.15	0.86	1.00	122.	2899.	0.	66298.	17038448.
3.	10.	3.	12.	4.	0.15	0.86	1.00	122.	2899.	4980.	60949.	16188520.
3.	10.	3.	14.	2.	0.15	0.86	1.00	122.	2899.	4980.	63517.	16702135.
3.	10.	3.	16.	1.	0.15	0.86	1.00	122.	2899.	4980.	81496.	20297952.
3.	10.	3.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-180.3
3.	10.	5.	2.	I	0.15	0.86	1.00	122.	2899.	0.	153877.	34554176.
3.	10.	5.	4.	I	0.15	0.86	1.00	122.	2899.	0.	81965.	20171744.
3.	10.	5.	6.	I	0.15	0.86	1.00	122.	2899.	0.	58002.	15379131.
3.	10.	5.	8.	2.	0.15	0.86	1.00	122.	2899.	4980.	54202.	14839222.
3.	10.	5.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-102.6
3.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-419.8
3.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1529.1
3.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5363.8
3.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-18536.7
4.	6.	1.	2.	31.	0.22	0.33	1.00	195.	1074.	6542.	406949.	85288512.
4.	6.	1.	4.	15.	0.22	0.33	1.00	195.	1074.	6542.	273282.	58555152.
4.	6.	1.	6.	10.	0.22	0.33	1.00	195.	1074.	6542.	228918.	49682480.
4.	6.	1.	8.	8.	0.22	0.33	1.00	195.	1074.	6542.	206883.	45275360.
4.	6.	1.	10.	6.	0.22	0.33	1.00	195.	1074.	6542.	193780.	42654720.
4.	6.	1.	12.	5.	0.22	0.33	1.00	195.	1074.	6542.	185144.	40927520.
4.	6.	1.	14.	4.	0.22	0.33	1.00	195.	1074.	6542.	179061.	39710976.
4.	6.	1.	16.	4.	0.22	0.33	1.00	195.	1074.	6542.	174575.	38813856.
4.	6.	1.	18.	3.	0.22	0.33	1.00	195.	1074.	6542.	171156.	38129888.
4.	6.	3.	2.	10.	0.22	0.33	1.00	195.	1074.	6542.	164111.	36721056.
4.	6.	3.	4.	5.	0.22	0.33	1.00	195.	1074.	6542.	120549.	28008528.
4.	6.	3.	6.	3.	0.22	0.33	1.00	195.	1074.	6542.	106646.	25227952.
4.	6.	3.	8.	2.	0.22	0.33	1.00	195.	1074.	6542.	100175.	23933712.
4.	6.	3.	10.	2.	0.22	0.33	1.00	195.	1074.	6542.	96690.	23236736.
4.	6.	3.	12.	1.	0.22	0.33	1.00	195.	1074.	6542.	94711.	22840896.
4.	6.	3.	14.	1.	0.22	0.33	1.00	195.	1074.	6542.	93603.	22619296.
4.	6.	3.	16.	1.	0.22	0.33	1.00	195.	1074.	6542.	93050.	22508720.
4.	6.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

4.	6.	5.	2.	6.	0.22	0.33	1.00	195.	1074.	6542.	116508.	27200448.
4.	6.	5.	4.	3.	0.22	0.33	1.00	195.	1074.	6542.	91512.	22201168.
4.	6.	5.	6.	2.	0.22	0.33	1.00	195.	1074.	6542.	84286.	20756048.
4.	6.	5.	8.	1.	0.22	0.33	1.00	195.	1074.	6542.	81556.	20210080.
4.	6.	5.	10.	1.	0.22	0.33	1.00	195.	1074.	6542.	80815.	20061728.
4.	6.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	6.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	6.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-87.0
4.	6.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-131.2
4.	8.	1.	2.	33.	0.22	0.37	1.00	195.	1206.	5757.	430417.	90102096.
4.	8.	1.	4.	16.	0.22	0.37	1.00	195.	1206.	5757.	280289.	60076560.
4.	8.	1.	6.	11.	0.22	0.37	1.00	195.	1206.	5757.	230468.	50112416.
4.	8.	1.	8.	8.	0.22	0.37	1.00	195.	1206.	5757.	205727.	45164208.
4.	8.	1.	10.	6.	0.22	0.37	1.00	195.	1206.	5757.	191020.	42222832.
4.	8.	1.	12.	5.	0.22	0.37	1.00	195.	1206.	5757.	181332.	40285248.
4.	8.	1.	14.	4.	0.22	0.37	1.00	195.	1206.	5757.	174514.	38921552.
4.	8.	1.	16.	4.	0.22	0.37	1.00	195.	1206.	5757.	169491.	37916896.
4.	8.	1.	18.	3.	0.22	0.37	1.00	195.	1206.	5757.	165666.	37151888.
4.	8.	3.	2.	11.	0.22	0.37	1.00	195.	1206.	5757.	165531.	37125008.
4.	8.	3.	4.	5.	0.22	0.37	1.00	195.	1206.	5757.	116635.	27345696.
4.	8.	3.	6.	3.	0.22	0.37	1.00	195.	1206.	5757.	101064.	24231648.
4.	8.	3.	8.	2.	0.22	0.37	1.00	195.	1206.	5757.	93855.	22789872.
4.	8.	3.	10.	2.	0.22	0.37	1.00	195.	1206.	5757.	90016.	22022064.
4.	8.	3.	12.	2.	0.22	0.37	1.00	195.	1206.	5757.	87886.	21595920.
4.	8.	3.	14.	1.	0.22	0.37	1.00	195.	1206.	5757.	86752.	21369280.
4.	8.	3.	16.	1.	0.22	0.37	1.00	195.	1206.	5757.	86263.	21271456.
4.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	5.	2.	6.	0.22	0.37	1.00	195.	1206.	5757.	113530.	26724688.
4.	8.	5.	4.	3.	0.22	0.37	1.00	195.	1206.	5757.	85532.	21125104.
4.	8.	5.	6.	1.	0.22	0.37	1.00	195.	1206.	5757.	119267.	27872208.
4.	8.	5.	8.	1.	0.22	0.37	1.00	195.	1206.	5757.	74640.	18946848.
4.	8.	5.	10.	1.	0.22	0.37	1.00	195.	1206.	5757.	73874.	18793648.
4.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

4.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-107.8
4.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-171.2
4.	10.	1.	2.	I	0.22	0.86	1.00	195.	2210.	0.	646383.	133775360.
4.	10.	1.	4.	I	0.22	0.86	1.00	195.	2210.	0.	370745.	78647808.
4.	10.	1.	6.	I	0.22	0.86	1.00	195.	2210.	0.	278869.	60272512.
4.	10.	1.	8.	I	0.22	0.86	1.00	195.	2210.	0.	232932.	51085152.
4.	10.	1.	10.	I	0.22	0.86	1.00	195.	2210.	0.	205371.	45573008.
4.	10.	1.	12.	I	0.22	0.86	1.00	195.	2210.	0.	186999.	41898512.
4.	10.	1.	14.	I	0.22	0.86	1.00	195.	2210.	0.	173876.	39274048.
4.	10.	1.	16.	I	0.22	0.86	1.00	195.	2210.	0.	164036.	37305888.
4.	10.	1.	18.	I	0.22	0.86	1.00	195.	2210.	0.	156382.	35775216. ← h_1
4.	10.	3.	2.	I	0.22	0.86	1.00	195.	2210.	0.	213091.	47117040.
4.	10.	3.	4.	I	0.22	0.86	1.00	195.	2210.	0.	121618.	28822480.
4.	10.	3.	6.	I	0.22	0.86	1.00	195.	2210.	0.	91134.	22725648.
4.	10.	3.	8.	I	0.22	0.86	1.00	195.	2210.	0.	75897.	19678272.
4.	10.	3.	10.	I	0.22	0.86	1.00	195.	2210.	0.	66759.	17850672.
4.	10.	3.	12.	7.	0.22	0.86	1.00	195.	2210.	4980.	61076.	16934048. ← h_2
4.	10.	3.	14.	3.	0.22	0.86	1.00	195.	2210.	4980.	61198.	16958384.
4.	10.	3.	16.	1.	0.22	0.86	1.00	195.	2210.	4980.	77823.	20283360.
4.	10.	3.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-134.9
4.	10.	5.	2.	I	0.22	0.86	1.00	195.	2210.	0.	126449.	29788592.
4.	10.	5.	4.	I	0.22	0.86	1.00	195.	2210.	0.	71813.	18861456.
4.	10.	5.	6.	I	0.22	0.86	1.00	195.	2210.	0.	53613.	15221362.
4.	10.	5.	8.	3.	0.22	0.86	1.00	195.	2210.	4980.	48188.	14356321. ← h_2 ⟸ h_{min}
4.	10.	5.	10.	1.	0.22	0.86	1.00	195.	2210.	4980.	61572.	17033136.
4.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-331.9
4.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1242.0
4.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4410.5
4.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-15333.3
5.	6.	1.	2.	31.	0.25	0.33	1.00	316.	1033.	6542.	456883.	95995472.
5.	6.	1.	4.	15.	0.25	0.33	1.00	316.	1033.	6542.	328336.	70286000.
5.	6.	1.	6.	10.	0.25	0.33	1.00	316.	1033.	6542.	285619.	61742560.

5.	6.	1.	8.	8.	0.25	0.33	1.00	316.	1033.	6542.	264360.	57490800.
5.	6.	1.	10.	6.	0.25	0.33	1.00	316.	1033.	6542.	251684.	54955648.
5.	6.	1.	12.	5.	0.25	0.33	1.00	316.	1033.	6542.	243301.	53278976.
5.	6.	1.	14.	4.	0.25	0.33	1.00	316.	1033.	6542.	237370.	52092816.
5.	6.	1.	16.	4.	0.25	0.33	1.00	316.	1033.	6542.	232973.	51213408.
5.	6.	1.	18.	3.	0.25	0.33	1.00	316.	1033.	6542.	229599.	50538512. ← h. ✱
5.	6.	3.	2.	10.	0.25	0.33	1.00	316.	1033.	6542.	180501.	40718976.
5.	6.	3.	4.	5.	0.25	0.33	1.00	316.	1033.	6542.	138413.	32301456.
5.	6.	3.	6.	3.	0.25	0.33	1.00	316.	1033.	6542.	124799.	29578496.
5.	6.	3.	8.	2.	0.25	0.33	1.00	316.	1033.	6542.	118308.	28280320.
5.	6.	3.	10.	2.	0.25	0.33	1.00	316.	1033.	6542.	114670.	27552832.
5.	6.	3.	12.	2.	0.25	0.33	1.00	316.	1033.	6542.	112464.	27111520.
5.	6.	3.	14.	1.	0.25	0.33	1.00	316.	1033.	6542.	111078.	26834288.
5.	6.	3.	16.	1.	0.25	0.33	1.00	316.	1033.	6542.	110207.	26660208. ← h.
5.	6.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	6.	5.	2.	6.	0.25	0.33	1.00	316.	1033.	6542.	126109.	29840560.
5.	6.	5.	4.	3.	0.25	0.33	1.00	316.	1033.	6542.	101676.	24954000.
5.	6.	5.	6.	1.	0.25	0.33	1.00	316.	1033.	6542.	142572.	33133216.
5.	6.	5.	8.	1.	0.25	0.33	1.00	316.	1033.	6542.	91111.	22840896.
5.	6.	5.	10.	1.	0.25	0.33	1.00	316.	1033.	6542.	89684.	22555520. ← h. ∈
5.	6.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	6.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	6.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-83.0
5.	6.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-124.6
5.	8.	1.	2.	33.	0.25	0.37	1.00	316.	1110.	5757.	466688.	98076288.
5.	8.	1.	4.	17.	0.25	0.37	1.00	316.	1110.	5757.	328550.	70448880.
5.	8.	1.	6.	11.	0.25	0.37	1.00	316.	1110.	5757.	282675.	61273792.
5.	8.	1.	8.	8.	0.25	0.37	1.00	316.	1110.	5757.	259866.	56712032.
5.	8.	1.	10.	6.	0.25	0.37	1.00	316.	1110.	5757.	246285.	53995696.
5.	8.	1.	12.	5.	0.25	0.37	1.00	316.	1110.	5757.	237318.	52202400.
5.	8.	1.	14.	5.	0.25	0.37	1.00	316.	1110.	5757.	230989.	50936640.
5.	8.	1.	16.	4.	0.25	0.37	1.00	316.	1110.	5757.	226310.	50000736.
5.	8.	1.	18.	3.	0.25	0.37	1.00	316.	1110.	5757.	222731.	49284960. ← h.

5.	8.	3.	2.	11.	0.25	0.37	1.00	316.	1110.	5757.	177430.	40224720.
5.	8.	3.	4.	5.	0.25	0.37	1.00	316.	1110.	5757.	132324.	31203552.
5.	8.	3.	6.	3.	0.25	0.37	1.00	316.	1110.	5757.	117834.	28305648.
5.	8.	3.	8.	3.	0.25	0.37	1.00	316.	1110.	5757.	111013.	26941456.
5.	8.	3.	10.	2.	0.25	0.37	1.00	316.	1110.	5757.	107271.	26193056.
5.	8.	3.	12.	1.	0.25	0.37	1.00	316.	1110.	5757.	133178.	31374400.
5.	8.	3.	14.	1.	0.25	0.37	1.00	316.	1110.	5757.	103783.	25495312.
5.	8.	3.	16.	1.	0.25	0.37	1.00	316.	1110.	5757.	103053.	25349472. ← h_L
5.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	8.	5.	2.	6.	0.25	0.37	1.00	316.	1110.	5757.	120484.	28835616.
5.	8.	5.	4.	3.	0.25	0.37	1.00	316.	1110.	5757.	94469.	23632672.
5.	8.	5.	6.	2.	0.25	0.37	1.00	316.	1110.	5757.	86777.	22094240.
5.	8.	5.	8.	1.	0.25	0.37	1.00	316.	1110.	5757.	83711.	21481040.
5.	8.	5.	10.	1.	0.25	0.37	1.00	316.	1110.	5757.	82534.	21245664. ← h_L ∈
5.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -102.5							
5.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -162.2							
5.	10.	1.	2.	I	0.25	0.86	1.00	316.	1797.	0.	603922.	126003280.
5.	10.	1.	4.	I	0.25	0.86	1.00	316.	1797.	0.	379848.	81188352.
5.	10.	1.	6.	I	0.25	0.86	1.00	316.	1797.	0.	305159.	66250560.
5.	10.	1.	8.	I	0.25	0.86	1.00	316.	1797.	0.	267817.	58782096.
5.	10.	1.	10.	I	0.25	0.86	1.00	316.	1797.	0.	245413.	54301296.
5.	10.	1.	12.	I	0.25	0.86	1.00	316.	1797.	0.	230478.	51314352.
5.	10.	1.	14.	I	0.25	0.86	1.00	316.	1797.	0.	219811.	49181056.
5.	10.	1.	16.	I	0.25	0.86	1.00	316.	1797.	0.	211812.	47581248.
5.	10.	1.	18.	I	0.25	0.86	1.00	316.	1797.	0.	205592.	46337136. ← h_L
5.	10.	3.	2.	I	0.25	0.86	1.00	316.	1797.	0.	199073.	45033440.
5.	10.	3.	4.	I	0.25	0.86	1.00	316.	1797.	0.	124767.	30172160.
5.	10.	3.	6.	I	0.25	0.86	1.00	316.	1797.	0.	100006.	25219904.
5.	10.	3.	8.	I	0.25	0.86	1.00	316.	1797.	0.	87631.	22744912.
5.	10.	3.	10.	I	0.25	0.86	1.00	316.	1797.	0.	80210.	21260816. ← h_L
5.	10.	3.	12.	I	0.25	0.86	1.00	316.	1797.	0.	75267.	20272176.

5.	10.	3.	14.	4.	0.25	0.86	1.00	316.	1797.	4980.	74434.	20325648.
5.	10.	3.	16.	2.	0.25	0.86	1.00	316.	1797.	4980.	78142.	21067216.
5.	10.	3.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-110.6
5.	10.	5.	2.	I	0.25	0.86	1.00	316.	1797.	0.	118121.	28943056.
5.	10.	5.	4.	I	0.25	0.86	1.00	316.	1797.	0.	73773.	19973376.
5.	10.	5.	6.	I	0.25	0.86	1.00	316.	1797.	0.	59003.	17019312.
5.	10.	5.	8.	4.	0.25	0.86	1.00	316.	1797.	4980.	53591.	16156988. ← h_1 ✓
5.	10.	5.	10.	1.	0.25	0.86	1.00	316.	1797.	4980.	61567.	17752096.
5.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-284.8
5.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1089.2
5.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3906.3
5.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-13649.6
6.	8.	1.	2.	33.	0.33	0.37	1.00	522.	1057.	5757.	555673.	117482656.
6.	8.	1.	4.	17.	0.33	0.37	1.00	522.	1057.	5757.	424053.	91158640.
6.	8.	1.	6.	11.	0.33	0.37	1.00	522.	1057.	5757.	380238.	82395648.
6.	8.	1.	8.	8.	0.33	0.37	1.00	522.	1057.	5757.	358375.	78022928.
6.	8.	1.	10.	7.	0.33	0.37	1.00	522.	1057.	5757.	345291.	75406256.
6.	8.	1.	12.	5.	0.33	0.37	1.00	522.	1057.	5757.	336598.	73667632.
6.	8.	1.	14.	5.	0.33	0.37	1.00	522.	1057.	5757.	330414.	72430752.
6.	8.	1.	16.	4.	0.33	0.37	1.00	522.	1057.	5757.	325797.	71507456.
6.	8.	1.	18.	4.	0.33	0.37	1.00	522.	1057.	5757.	322226.	70793168. ← h_1 ✓
6.	8.	3.	2.	11.	0.33	0.37	1.00	522.	1057.	5757.	206535.	47654912.
6.	8.	3.	4.	5.	0.33	0.37	1.00	522.	1057.	5757.	163190.	38985968.
6.	8.	3.	6.	4.	0.33	0.37	1.00	522.	1057.	5757.	148922.	36132288.
6.	8.	3.	8.	3.	0.33	0.37	1.00	522.	1057.	5757.	141922.	34732288.
6.	8.	3.	10.	2.	0.33	0.37	1.00	522.	1057.	5757.	137828.	33913648.
6.	8.	3.	12.	2.	0.33	0.37	1.00	522.	1057.	5757.	135188.	33385632.
6.	8.	3.	14.	1.	0.33	0.37	1.00	522.	1057.	5757.	133378.	33023616.
6.	8.	3.	16.	1.	0.33	0.37	1.00	522.	1057.	5757.	132086.	32765136. ← h_1
6.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	8.	5.	2.	6.	0.33	0.37	1.00	522.	1057.	5757.	137467.	33841296.
6.	8.	5.	4.	3.	0.33	0.37	1.00	522.	1057.	5757.	111933.	28734560.
6.	8.	5.	6.	2.	0.33	0.37	1.00	522.	1057.	5757.	103729.	27093872.

6.	8.	5.	8.	2.	0.33	0.37	1.00	522.	1057.	5757.	99857.	26319328.
6.	8.	5.	10.	1.	0.33	0.37	1.00	522.	1057.	5757.	97715.	25890896.
6.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-91.5
6.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-143.4
6.	10.	1.	2.	I	0.33	0.86	1.00	522.	1563.	0.	647763.	136380592.
6.	10.	1.	4.	I	0.33	0.86	1.00	522.	1563.	0.	453002.	97428320.
6.	10.	1.	6.	I	0.33	0.86	1.00	522.	1563.	0.	388085.	84444992.
6.	10.	1.	8.	I	0.33	0.86	1.00	522.	1563.	0.	355630.	77953936.
6.	10.	1.	10.	I	0.33	0.86	1.00	522.	1563.	0.	336159.	74059760.
6.	10.	1.	12.	I	0.33	0.86	1.00	522.	1563.	0.	323180.	71463952.
6.	10.	1.	14.	I	0.33	0.86	1.00	522.	1563.	0.	313911.	69610192.
6.	10.	1.	16.	I	0.33	0.86	1.00	522.	1563.	0.	306961.	68220096.
6.	10.	1.	18.	I	0.33	0.86	1.00	522.	1563.	0.	301556.	67139200.
6.	10.	3.	2.	I	0.33	0.86	1.00	522.	1563.	0.	213394.	49506848.
6.	10.	3.	4.	I	0.33	0.86	1.00	522.	1563.	0.	148914.	36610720.
6.	10.	3.	6.	I	0.33	0.86	1.00	522.	1563.	0.	127431.	32314240.
6.	10.	3.	8.	I	0.33	0.86	1.00	522.	1563.	0.	116698.	30167680.
6.	10.	3.	10.	I	0.33	0.86	1.00	522.	1563.	0.	110265.	28881056.
6.	10.	3.	12.	I	0.33	0.86	1.00	522.	1563.	0.	105982.	28024432.
6.	10.	3.	14.	I	0.33	0.86	1.00	522.	1563.	0.	102928.	27413520.
6.	10.	3.	16.	3.	0.33	0.86	1.00	522.	1563.	4980.	103056.	27659248.
6.	10.	3.	18.	2.	0.33	0.86	1.00	522.	1563.	4980.	106066.	28261120.
6.	10.	5.	2.	I	0.33	0.86	1.00	522.	1563.	0.	126547.	32137408.
6.	10.	5.	4.	I	0.33	0.86	1.00	522.	1563.	0.	88129.	24453792.
6.	10.	5.	6.	I	0.33	0.86	1.00	522.	1563.	0.	75341.	21896272.
6.	10.	5.	8.	I	0.33	0.86	1.00	522.	1563.	0.	68961.	20620272.
6.	10.	5.	10.	2.	0.33	0.86	1.00	522.	1563.	4980.	70038.	21055568.
6.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-185.5
6.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-769.2
6.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2857.4
6.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-10170.3

7.	8.	1.	2.	33.	0.36	0.37	1.00	684.	1033.	5757.	630592.	133186432.
7.	8.	1.	4.	17.	0.36	0.37	1.00	684.	1033.	5757.	501963.	107460560.
7.	8.	1.	6.	11.	0.36	0.37	1.00	684.	1033.	5757.	459098.	98887552.
7.	8.	1.	8.	8.	0.36	0.37	1.00	684.	1033.	5757.	437674.	94602752.
7.	8.	1.	10.	7.	0.36	0.37	1.00	684.	1033.	5757.	424826.	92033216.
7.	8.	1.	12.	6.	0.36	0.37	1.00	684.	1033.	5757.	416267.	90321312.
7.	8.	1.	14.	5.	0.36	0.37	1.00	684.	1033.	5757.	410158.	89099520.
7.	8.	1.	16.	4.	0.36	0.37	1.00	684.	1033.	5757.	405580.	88183968.
7.	8.	1.	18.	4.	0.36	0.37	1.00	684.	1033.	5757.	402023.	87472640. ← $h_{1,A}$
7.	8.	3.	2.	11.	0.36	0.37	1.00	684.	1033.	5757.	231281.	53324256.
7.	8.	3.	4.	5.	0.36	0.37	1.00	684.	1033.	5757.	188761.	44820112.
7.	8.	3.	6.	4.	0.36	0.37	1.00	684.	1033.	5757.	174622.	41992288.
7.	8.	3.	8.	3.	0.36	0.37	1.00	684.	1033.	5757.	167577.	40583456.
7.	8.	3.	10.	2.	0.36	0.37	1.00	684.	1033.	5757.	163371.	39742160.
7.	8.	3.	12.	2.	0.36	0.37	1.00	684.	1033.	5757.	160583.	39184592.
7.	8.	3.	14.	2.	0.36	0.37	1.00	684.	1033.	5757.	158605.	38789072.
7.	8.	3.	16.	1.	0.36	0.37	1.00	684.	1033.	5757.	157134.	38494816. ← h_1
7.	8.	3.	18.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	5.	2.	6.	0.36	0.37	1.00	684.	1033.	5757.	152118.	37491520.
7.	8.	5.	4.	3.	0.36	0.37	1.00	684.	1033.	5757.	126846.	32437216.
7.	8.	5.	6.	2.	0.36	0.37	1.00	684.	1033.	5757.	118480.	30764000.
7.	8.	5.	8.	2.	0.36	0.37	1.00	684.	1033.	5757.	114339.	29935776.
7.	8.	5.	10.	1.	0.36	0.37	1.00	684.	1033.	5757.	111887.	29445376. ← $h_{1,E}$
7.	8.	5.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	5.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-87.0
7.	8.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-135.8
7.	10.	1.	2.	I	0.36	0.86	1.00	684.	1418.	0.	692747.	146097408.
7.	10.	1.	4.	I	0.36	0.86	1.00	684.	1418.	0.	516100.	110768016.
7.	10.	1.	6.	I	0.36	0.86	1.00	684.	1418.	0.	457222.	98992336.
7.	10.	1.	8.	I	0.36	0.86	1.00	684.	1418.	0.	427786.	93105136.
7.	10.	1.	10.	I	0.36	0.86	1.00	684.	1418.	0.	410127.	89573312.
7.	10.	1.	12.	I	0.36	0.86	1.00	684.	1418.	0.	398356.	87219168.

7.	10.	1.	14.	I	0.36	0.86	1.00	684.	1418.	0.	389950.	85538000.
7.	10.	1.	16.	I	0.36	0.86	1.00	684.	1418.	0.	383647.	84277408.
7.	10.	1.	18.	I	0.36	0.86	1.00	684.	1418.	0.	378746.	83297248.
7.	10.	3.	2.	I	0.36	0.86	1.00	684.	1418.	0.	228394.	53226752.
7.	10.	3.	4.	I	0.36	0.86	1.00	684.	1418.	0.	169952.	41538448.
7.	10.	3.	6.	I	0.36	0.86	1.00	684.	1418.	0.	150484.	37644816.
7.	10.	3.	8.	I	0.36	0.86	1.00	684.	1418.	0.	140759.	35699840.
7.	10.	3.	10.	I	0.36	0.86	1.00	684.	1418.	0.	134932.	34534320.
7.	10.	3.	12.	I	0.36	0.86	1.00	684.	1418.	0.	131053.	33758512.
7.	10.	3.	14.	I	0.36	0.86	1.00	684.	1418.	0.	128287.	33205440.
7.	10.	3.	16.	5.	0.36	0.86	1.00	684.	1418.	4980.	127004.	33168800.
7.	10.	3.	18.	2.	0.36	0.86	1.00	684.	1418.	4980.	128551.	33478272.
7.	10.	5.	2.	I	0.36	0.86	1.00	684.	1418.	0.	135553.	34658512.
7.	10.	5.	4.	I	0.36	0.86	1.00	684.	1418.	0.	100759.	27699840.
7.	10.	5.	6.	I	0.36	0.86	1.00	684.	1418.	0.	89182.	25384336.
7.	10.	5.	8.	I	0.36	0.86	1.00	684.	1418.	0.	83408.	24229632.
7.	10.	5.	10.	3.	0.36	0.86	1.00	684.	1418.	4980.	82532.	24274416.
7.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-144.0
7.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-636.4
7.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2425.4
7.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8747.0
8.	10.	1.	2.	I	0.37	0.86	1.00	1008.	1247.	0.	812133.	171414656.
8.	10.	1.	4.	I	0.37	0.86	1.00	1008.	1247.	0.	656835.	140355072.
8.	10.	1.	6.	I	0.37	0.86	1.00	1008.	1247.	0.	605073.	130002592.
8.	10.	1.	8.	I	0.37	0.86	1.00	1008.	1247.	0.	579195.	124826960.
8.	10.	1.	10.	I	0.37	0.86	1.00	1008.	1247.	0.	563670.	121722000.
8.	10.	1.	12.	I	0.37	0.86	1.00	1008.	1247.	0.	553322.	119652416.
8.	10.	1.	14.	I	0.37	0.86	1.00	1008.	1247.	0.	545932.	118174448.
8.	10.	1.	16.	I	0.37	0.86	1.00	1008.	1247.	0.	540391.	117066256.
8.	10.	1.	18.	I	0.37	0.86	1.00	1008.	1247.	0.	536083.	116204592.
8.	10.	3.	2.	I	0.37	0.86	1.00	1008.	1247.	0.	268459.	62679696.
8.	10.	3.	4.	I	0.37	0.86	1.00	1008.	1247.	0.	217086.	52405280.
8.	10.	3.	6.	I	0.37	0.86	1.00	1008.	1247.	0.	199974.	48982688.

8.	10.	3.	8.	I	0.37	0.86	1.00	1008.	1247.	0.	191425.	47273072.
8.	10.	3.	10.	I	0.37	0.86	1.00	1008.	1247.	0.	186303.	46248656.
8.	10.	3.	12.	I	0.37	0.86	1.00	1008.	1247.	0.	182894.	45566800.
8.	10.	3.	14.	I	0.37	0.86	1.00	1008.	1247.	0.	180464.	45080720.
8.	10.	3.	16.	5.	0.37	0.86	1.00	1008.	1247.	4980.	179202.	45048352.
8.	10.	3.	18.	3.	0.37	0.86	1.00	1008.	1247.	4980.	180704.	45348800.
8.	10.	5.	2.	I	0.37	0.86	1.00	1008.	1247.	0.	159750.	40937952.
8.	10.	5.	4.	I	0.37	0.86	1.00	1008.	1247.	0.	129170.	34821888.
8.	10.	5.	6.	I	0.37	0.86	1.00	1008.	1247.	0.	118995.	32786896.
8.	10.	5.	8.	I	0.37	0.86	1.00	1008.	1247.	0.	113921.	31772128.
8.	10.	5.	10.	3.	0.37	0.86	1.00	1008.	1247.	4980.	113122.	31832352.
8.	10.	5.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-136.7
8.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-613.1
8.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2349.5
8.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8497.6
9.	10.	1.	2.	I	0.44	0.86	1.00	1402.	1164.	0.	988273.	208442576.
9.	10.	1.	4.	I	0.44	0.86	1.00	1402.	1164.	0.	843427.	179473360.
9.	10.	1.	6.	I	0.44	0.86	1.00	1402.	1164.	0.	795150.	169817936.
9.	10.	1.	8.	I	0.44	0.86	1.00	1402.	1164.	0.	771015.	164990992.
9.	10.	1.	10.	I	0.44	0.86	1.00	1402.	1164.	0.	756537.	162095408.
9.	10.	1.	12.	I	0.44	0.86	1.00	1402.	1164.	0.	746888.	160165552.
9.	10.	1.	14.	I	0.44	0.86	1.00	1402.	1164.	0.	739998.	158787488.
9.	10.	1.	16.	I	0.44	0.86	1.00	1402.	1164.	0.	734832.	157754336.
9.	10.	1.	18.	I	0.44	0.86	1.00	1402.	1164.	0.	730816.	156951088.
9.	10.	3.	2.	I	0.44	0.86	1.00	1402.	1164.	0.	326912.	76170336.
9.	10.	3.	4.	I	0.44	0.86	1.00	1402.	1164.	0.	279073.	66602656.
9.	10.	3.	6.	I	0.44	0.86	1.00	1402.	1164.	0.	263142.	63416432.
9.	10.	3.	8.	I	0.44	0.86	1.00	1402.	1164.	0.	255188.	61825552.
9.	10.	3.	10.	I	0.44	0.86	1.00	1402.	1164.	0.	250424.	60872816.
9.	10.	3.	12.	I	0.44	0.86	1.00	1402.	1164.	0.	247256.	60239136.
9.	10.	3.	14.	I	0.44	0.86	1.00	1402.	1164.	0.	244999.	59787792.
9.	10.	3.	16.	I	0.44	0.86	1.00	1402.	1164.	0.	243312.	59450368.
9.	10.	3.	18.	I	0.44	0.86	1.00	1402.	1164.	0.	242005.	59188912.

9.	10.	5.	2.	I	0.44	0.86	1.00	1402.	1164.	0.	194675.	49722976.
9.	10.	5.	4.	I	0.44	0.86	1.00	1402.	1164.	0.	166247.	44037328.
9.	10.	5.	6.	I	0.44	0.86	1.00	1402.	1164.	0.	156795.	42147056.
9.	10.	5.	8.	I	0.44	0.86	1.00	1402.	1164.	0.	152088.	41205600.
9.	10.	5.	10.	I	0.44	0.86	1.00	1402.	1164.	0.	149278.	40643648. ← n_E
9.	10.	5.	12.	3.	0.44	0.86	1.00	1402.	1164.	4980.	149937.	40995296.
9.	10.	5.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-336.4
9.	10.	5.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1455.3
9.	10.	5.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5572.2

10 ↓ since m_2 go 2-11 in steps of 2 no even value > 10 & < 11

cant have

TABLE 4

EXAMPLE RESULTS 2

LIST OF INPUT DATA

```
      7.00        12.00        15.50
      2.00         2.00         2.00
     10.00       500.00      1000.00
      0.0         10.00        10.00
      0.01         0.10         0.75
     20.00         2.00         1.00
      1.00        10.00         1.00
      2.00        11.00         2.00
      7.00        11.00         2.00
      2.00        18.00         2.00
  50000.00        10.00       500.00
     12.00
      0.70
      0.15
     20.00
      7.00
     20.00
        1.000000         1.000000         1.500000         1.500000
        1.500000         1.500000         1.500000         1.500000
        2.000000         2.000000         2.000000         2.000000
        1.000000
    20000.000000     20000.000000     28000.000000     40000.000000
    40000.000000     89400.000000     40000.000000     80000.000000
   100000.000000    600000.000000    100000.000000    100000.000000
    20000.000000
        0.001020         0.000660         0.000550         0.001060
        0.000500         0.000280         0.000210         0.000450
        0.000120         0.000120         0.000010         0.000130
        0.001000
        0.001000         0.000900         0.001180         0.001260
        0.000700         0.001540         0.000670         0.000120
        0.001470         0.008570         0.001390         0.001350
        0.020150
        0.300000         0.300000         0.300000         0.300000
        0.500000         0.300000         0.300000         0.300000
        0.300000         1.000000         1.000000         2.000000
        0.200000
```

INPUT DATA DESCRIPTION

PAY RATE($/HR) AT TESTER	7.00	12.00	15.50
NO. MEN TO OPERATE TESTER	2.00	2.00	2.00
COST OF SHIPPING TO TESTER	10.00	500.00	1000.00
COST OF PACKING TO SHIP TO TESTER	0.0	10.00	10.00
TURNAROUND TIME(YRS) TO TEST ITEM	0.01	0.10	0.75
NUMBER OF TESTERS	20.00	2.00	1.00
NO. TESTER1 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	1.	10.	1.
NO. TESTER2 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	2.	11.	2.
NO. CYCLES BETWEEN FIRST ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)	7.	11.	2.

NO. X(CYCLES BETWEEN FIRST ECHELON TESTS)	2.	18.	2.
CYCLES BETWEEN SECOND ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)			
ITEM COST,ITEM LIFECYCLE,NO. OF ITEMS	50000.	10.	500.
NO. ITEM FUNCTIONS TESTED	12.		
FRACTION OF ITEMS IN USE NOT DEFECTIVE	0.70		
REPAIR MATERIAL RATIO	0.15		
NO. USE CYCLES	20.		
INITIAL VALVE FOR NEWTON-RAPHSON METHOD	7.		
MAXIMUM NO. ITERATIONS FOR N-R METHOD	20.		

TIME REQD TO REPAIR EQUIP. WHICH TESTS ITH FUN	1.000000	1.000000	1.500000	1.500000
	1.500000	1.500000	1.500000	1.500000
	2.000000	2.000000	2.000000	2.000000
	1.000000			
COST OF EQUIPMENT TO TEST ITH FUNCTION	20000.000000	20000.000000	28000.000000	40000.000000
	40000.000000	89400.000000	40000.000000	80000.000000
	100000.000000	600000.000000	100000.000000	100000.000000
	20000.000000			
FAILURE RATE OF EQUIP. TO TEST ITH FUNCTION	0.001020	0.000660	0.000550	0.001060
	0.000500	0.000280	0.000210	0.000450
	0.000120	0.000120	0.000010	0.000130
	0.001000			
FAILURE RATE OF ITH FUNCTION OF ITEM	0.001000	0.000900	0.001180	0.001260
	0.000700	0.001540	0.000670	0.000120
	0.001470	0.008570	0.001390	0.001350
	0.020150			
TIME REQD TO TEST ITH FUNCTION	0.300000	0.300000	0.300000	0.300000
	0.500000	0.300000	0.300000	0.300000
	0.300000	1.000000	1.000000	2.000000
	0.200000			

TEST COST SUMMARY

FUNCTIONS M1	M2	CYCLES N1	N2	N3	DEFECTIVE ITEMS FAILING TEST1	TEST2	TEST3	TEST1 COST	TEST2 COST	TEST3 COST	COMPLETE TEST COST	LIFE CYCLE COST
1.	2.	7.	2.	3.	0.05	0.09	1.00	73.	1027.	10307.	157088.	33535008.
1.	2.	7.	4.	1.	0.05	0.09	1.00	73.	1027.	10307.	140413.	30199888.
1.	2.	7.	6.	1.	0.05	0.09	1.00	73.	1027.	10307.	132431.	28603584. ← min(1,2)
1.	2.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	2.	7.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

1.	2.	7.	14.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-73.7
1.	2.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-89.8
1.	2.	9.	2.	2.	0.05	0.09	1.00	73.	1027.	10307.	148486.	31814544.
1.	2.	9.	4.	1.	0.05	0.09	1.00	73.	1027.	10307.	136380.	29393280. ←
1.	2.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	9.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	9.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-89.9
1.	2.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-113.6
1.	2.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-141.6
1.	2.	11.	2.	2.	0.05	0.09	1.00	73.	1027.	10307.	143278.	30772880.
1.	2.	11.	4.	1.	0.05	0.09	1.00	73.	1027.	10307.	134278.	28973008. ←
1.	2.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	11.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	2.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-71.8
1.	2.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-97.5
1.	2.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-128.7
1.	2.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-167.2
1.	2.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-215.1
1.	4.	7.	2.	3.	0.05	0.22	1.00	73.	1095.	7862.	116299.	25445104.
1.	4.	7.	4.	2.	0.05	0.22	1.00	73.	1095.	7862.	101505.	22486400. ←
1.	4.	7.	6.	1.	0.05	0.22	1.00	73.	1095.	7862.	100334.	22252160.
1.	4.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	4.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	4.	7.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	4.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-106.2
1.	4.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-156.0
1.	4.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-227.6
1.	4.	9.	2.	3.	0.05	0.22	1.00	73.	1095.	7862.	107931.	23771520.
1.	4.	9.	4.	1.	0.05	0.22	1.00	73.	1095.	7862.	99194.	22024176. ←
1.	4.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						

1.	4.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
1.	4.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-84.8
1.	4.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-140.1
1.	4.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-227.9
1.	4.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-369.1
1.	4.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-598.3
1.	4.	11.	2.	2.	0.05	0.22	1.00	73.	1095.	7862.	103205.	22826352.
1.	4.	11.	4.	1.	0.05	0.22	1.00	73.	1095.	7862.	99160.	22017312. ←
1.	4.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	11.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	4.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-148.2
1.	4.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-268.0
1.	4.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-483.2
1.	4.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-874.4
1.	4.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-1592.6
1.	6.	7.	2.	4.	0.05	0.33	1.00	73.	1330.	6542.	100223.	22359344.
1.	6.	7.	4.	1.	0.05	0.33	1.00	73.	1330.	6542.	126733.	27661360.
1.	6.	7.	6.	1.	0.05	0.33	1.00	73.	1330.	6542.	83641.	19042912. ←
1.	6.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	6.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	6.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-129.2
1.	6.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-234.2
1.	6.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-422.7
1.	6.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-764.2
1.	6.	9.	2.	3.	0.05	0.33	1.00	73.	1330.	6542.	90425.	20399696.
1.	6.	9.	4.	1.	0.05	0.33	1.00	73.	1330.	6542.	81485.	18611824. ← ←
1.	6.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	6.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
1.	6.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-167.2
1.	6.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-357.7
1.	6.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-765.4
1.	6.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-1648.6
1.	6.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-3579.1

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1.   6.  11.   2.   2.   0.05   0.33   1.00        73.      1330.      6542.      85017.     19318144.
1.   6.  11.   4.   1.   0.05   0.33   1.00        73.      1330.      6542.      82909.     18896592.
1.   6.  11.   6.   *    NO CONVERGENCE WITHIN 20 ITERATIONS
1.   6.  11.   8.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -153.8
1.   6.  11.  10.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -389.7
1.   6.  11.  12.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -989.1
1.   6.  11.  14.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -2537.2
1.   6.  11.  16.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -6584.2
1.   6.  11.  18.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE    -17260.4
1.   8.   7.   2.   4.   0.05   0.37   1.00        73.      1701.      5757.     103767.     23188224.
1.   8.   7.   4.   2.   0.05   0.37   1.00        73.      1701.      5757.      80147.     18464240.
1.   8.   7.   6.   1.   0.05   0.37   1.00        73.      1701.      5757.      78812.     18197200.
1.   8.   7.   8.   *    NO CONVERGENCE WITHIN 20 ITERATIONS
1.   8.   7.  10.   *    NO CONVERGENCE WITHIN 20 ITERATIONS
1.   8.   7.  12.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -165.0
1.   8.   7.  14.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -322.8
1.   8.   7.  16.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -630.7
1.   8.   7.  18.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -1236.7
1.   8.   9.   2.   3.   0.05   0.37   1.00        73.      1701.      5757.      90986.     20631984.
1.   8.   9.   4.   1.   0.05   0.37   1.00        73.      1701.      5757.      77129.     17860528.
1.   8.   9.   6.   *    NO CONVERGENCE WITHIN 20 ITERATIONS
1.   8.   9.   8.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -92.2
1.   8.   9.  10.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -220.5
1.   8.   9.  12.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -521.6
1.   8.   9.  14.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -1238.6
1.   8.   9.  16.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -2966.1
1.   8.   9.  18.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -7164.1
1.   8.  11.   2.   2.   0.05   0.37   1.00        73.      1701.      5757.      83685.     19171728.
1.   8.  11.   4.   1.   0.05   0.37   1.00        73.      1701.      5757.      77958.     18026480.
1.   8.  11.   6.   *    NO CONVERGENCE WITHIN 20 ITERATIONS
1.   8.  11.   8.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -200.7
1.   8.  11.  10.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -575.0
1.   8.  11.  12.   *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -1658.1
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1.	8.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4843.6
1.	8.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-14320.8
1.	8.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-42759.0
1.	10.	7.	2.	I	0.05	0.86	1.00	73.	4085.	0.	149588.	32832432.
1.	10.	7.	4.	11.	0.05	0.86	1.00	73.	4085.	4980.	77072.	18549088.
1.	10.	7.	6.	1.	0.05	0.86	1.00	73.	4085.	4980.	92748.	21684288.
1.	10.	7.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-342.9
1.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2047.5
1.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-11646.3
1.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-65485.7
1.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-367116.3
1.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2056307.0
1.	10.	9.	2.	I	0.05	0.86	1.00	73.	4085.	0.	116010.	26116688.
1.	10.	9.	4.	2.	0.05	0.86	1.00	73.	4085.	4980.	70329.	17200496.
1.	10.	9.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-264.4
1.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2638.5
1.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-24498.8
1.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-224914.1
1.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2060703.0
1.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
1.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
1.	10.	11.	2.	I	0.05	0.86	1.00	73.	4085.	0.	94642.	21843264.
1.	10.	11.	4.	0.	0.05	0.86	1.00	73.	4085.	4980.	127078.	28550288.
1.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1249.6
1.	10.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-19199.5
1.	10.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-288379.3
1.	10.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4320305.0
1.	10.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
1.	10.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
1.	10.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
2.	4.	7.	2.	3.	0.09	0.22	1.00	91.	1057.	7862.	115259.	25597200.
2.	4.	7.	4.	2.	0.09	0.22	1.00	91.	1057.	7862.	99803.	22505984.
2.	4.	7.	6.	1.	0.09	0.22	1.00	91.	1057.	7862.	97131.	21971632.

2.	4.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	7.	12.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-100.1
2.	4.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-146.0
2.	4.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-211.6
2.	4.	9.	2.	3.	0.09	0.22	1.00	91.	1057.	7862.	106716.	23888592.
2.	4.	9.	4.	1.	0.09	0.22	1.00	91.	1057.	7862.	96597.	21864720. ←
2.	4.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-80.3
2.	4.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-131.6
2.	4.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-212.1
2.	4.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-340.6
2.	4.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-547.3
2.	4.	11.	2.	2.	0.09	0.22	1.00	91.	1057.	7862.	101791.	22903664.
2.	4.	11.	4.	1.	0.09	0.22	1.00	91.	1057.	7862.	95594.	21664128. ← ≤ (2,4)
2.	4.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	11.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	4.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-139.2
2.	4.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-249.1
2.	4.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-444.2
2.	4.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-795.4
2.	4.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1433.2
2.	6.	7.	2.	4.	0.09	0.33	1.00	91.	1225.	6542.	96891.	22052928.
2.	6.	7.	4.	2.	0.09	0.33	1.00	91.	1225.	6542.	80477.	18770208. ←
2.	6.	7.	6.	1.	0.09	0.33	1.00	91.	1225.	6542.	81440.	18962720.
2.	6.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-121.8
2.	6.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-219.3
2.	6.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-392.9
2.	6.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-705.1

2.	6.	9.	2.	3.	0.09	0.33	1.00	91.	1225.	6542.	87466.	20167952.
2.	6.	9.	4.	1.	0.09	0.33	1.00	91.	1225.	6542.	78068.	18288304. ←
2.	6.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-157.4
2.	6.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-333.6
2.	6.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-707.2
2.	6.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1509.0
2.	6.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3245.8
2.	6.	11.	2.	2.	0.09	0.33	1.00	91.	1225.	6542.	82207.	19116256.
2.	6.	11.	4.	1.	0.09	0.33	1.00	91.	1225.	6542.	78467.	18368160. ←
2.	6.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	6.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-145.2
2.	6.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-363.7
2.	6.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-912.4
2.	6.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2313.7
2.	6.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5937.2
2.	6.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-15395.9
2.	8.	7.	2.	4.	0.09	0.37	1.00	91.	1514.	5757.	97463.	22287376.
2.	8.	7.	4.	2.	0.09	0.37	1.00	91.	1514.	5757.	76085.	18011696.
2.	8.	7.	6.	1.	0.09	0.37	1.00	91.	1514.	5757.	75641.	17922960. ←
2.	8.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-155.3
2.	8.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-301.5
2.	8.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-584.6
2.	8.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1137.7
2.	8.	9.	2.	3.	0.09	0.37	1.00	91.	1514.	5757.	85734.	19941600.
2.	8.	9.	4.	1.	0.09	0.37	1.00	91.	1514.	5757.	88078.	20410336. ←
2.	8.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-207.2
2.	8.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-495.3

2.	8.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1141.3
2.	8.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2707.0
2.	8.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-6478.0
2.	8.	11.	2.	2.	0.09	0.37	1.00	91.	1514.	5757.	79020.	18598752.
2.	8.	11.	4.	1.	0.09	0.37	1.00	91.	1514.	5757.	69233.	16641300.
2.	8.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	8.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-189.1
2.	8.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-535.2
2.	8.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1525.1
2.	8.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4404.1
2.	8.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-12877.1
2.	8.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-38037.8
2.	10.	7.	2.	I	0.09	0.86	1.00	91.	3431.	0.	126572.	28589088.
2.	10.	7.	4.	I	0.09	0.86	1.00	91.	3431.	0.	65720.	16418775.
2.	10.	7.	6.	1.	0.09	0.86	1.00	91.	3431.	4980.	69555.	17405840.
2.	10.	7.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-301.9
2.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1827.6
2.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-10430.7
2.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-58640.2
2.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-328123.0
2.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1832658.0
2.	10.	9.	2.	I	0.09	0.86	1.00	91.	3431.	0.	97912.	22857232.
2.	10.	9.	4.	3.	0.09	0.86	1.00	91.	3431.	4980.	58033.	15101382.
2.	10.	9.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-233.4
2.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2366.5
2.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-22012.6
2.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-201661.5
2.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1840604.0
2.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
2.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
2.	10.	11.	2.	I	0.09	0.86	1.00	91.	3431.	0.	79677.	19210160.
2.	10.	11.	4.	1.	0.09	0.86	1.00	91.	3431.	4980.	83559.	20206672.
2.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1123.0

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2.  10.  11.   8.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -17305.3
2.  10.  11.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -259107.1
2.  10.  11.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -3861183.0
2.  10.  11.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
2.  10.  11.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
2.  10.  11.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
3.   4.   7.   2.   3.    0.15    0.22    1.00         122.       1031.       7862.      115434.      26136112.
3.   4.   7.   4.   2.    0.15    0.22    1.00         122.       1031.       7862.       98833.      22816064.
3.   4.   7.   6.   1.    0.15    0.22    1.00         122.       1031.       7862.       94430.      21935344. ←
3.   4.   7.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.   7.  10.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.   7.  12.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.   7.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -92.5
3.   4.   7.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -133.9
3.   4.   7.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -192.3
3.   4.   9.   2.   3.    0.15    0.22    1.00         122.       1031.       7862.      106343.      24317920.
3.   4.   9.   4.   1.    0.15    0.22    1.00         122.       1031.       7862.       94362.      21921824. ←
3.   4.   9.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.   9.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.   9.  10.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.   9.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -121.1
3.   4.   9.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -193.1
3.   4.   9.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -306.5
3.   4.   9.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -487.1
3.   4.  11.   2.   2.    0.15    0.22    1.00         122.       1031.       7862.      100963.      23242064.
3.   4.  11.   4.   1.    0.15    0.22    1.00         122.       1031.       7862.       92147.      21478752. ←
3.   4.  11.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.  11.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   4.  11.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -128.2
3.   4.  11.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -226.3
3.   4.  11.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -398.1
3.   4.  11.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -702.9
3.   4.  11.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -1249.5
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3.	6.	7.	2.	4.	0.15	0.33	1.00	122.	1146.	6542.	95278.	22234480.
3.	6.	7.	4.	2.	0.15	0.33	1.00	122.	1146.	6542.	78808.	18940400.
3.	6.	7.	6.	1.	0.15	0.33	1.00	122.	1146.	6542.	76312.	18441264.
3.	6.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-112.7
3.	6.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-200.9
3.	6.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-356.6
3.	6.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-633.8
3.	6.	9.	2.	3.	0.15	0.33	1.00	122.	1146.	6542.	85758.	20330400.
3.	6.	9.	4.	1.	0.15	0.33	1.00	122.	1146.	6542.	75262.	18231200.
3.	6.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-145.3
3.	6.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-304.3
3.	6.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-637.0
3.	6.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1342.5
3.	6.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2852.8
3.	6.	11.	2.	2.	0.15	0.33	1.00	122.	1146.	6542.	80332.	19245152.
3.	6.	11.	4.	1.	0.15	0.33	1.00	122.	1146.	6542.	74366.	18051920.
3.	6.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	6.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-134.5
3.	6.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-332.0
3.	6.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-820.1
3.	6.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2048.5
3.	6.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5180.6
3.	6.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-13246.7
3.	8.	7.	2.	4.	0.15	0.37	1.00	122.	1364.	5757.	93376.	21974000.
3.	8.	7.	4.	2.	0.15	0.37	1.00	122.	1364.	5757.	73345.	17967792.
3.	8.	7.	6.	1.	0.15	0.37	1.00	122.	1364.	5757.	70056.	17309984.
3.	8.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	8.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	8.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-143.1

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3.   8.   7.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -275.2
3.   8.   7.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -528.5
3.   8.   7.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1018.3
3.   8.   9.   2.   3.    0.15    0.37    1.00         122.       1364.       5757.      82133.     19725376.
3.   8.   9.   4.   1.    0.15    0.37    1.00         122.       1364.       5757.      69137.     17126272.
3.   8.   9.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   8.   9.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   8.   9.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -190.6
3.   8.   9.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -440.9
3.   8.   9.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1023.7
3.   8.   9.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -2397.9
3.   8.   9.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -5669.1
3.   8.  11.   2.   2.    0.15    0.37    1.00         122.       1364.       5757.      75628.     18424464.
3.   8.  11.   4.   1.    0.15    0.37    1.00         122.       1364.       5757.      67994.     16897536.
3.   8.  11.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
3.   8.  11.   8.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -174.6
3.   8.  11.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -486.6
3.   8.  11.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1365.1
3.   8.  11.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -3882.8
3.   8.  11.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -11189.1
3.   8.  11.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -32595.7
3.  10.   7.   2.   1    0.15    0.86    1.00         122.       2899.          0.     108978.     25574480.
3.  10.   7.   4.   1    0.15    0.86    1.00         122.       2899.          0.      57778.     15334412.
3.  10.   7.   6.   2.    0.15    0.86    1.00         122.       2899.       4980.      53899.     14778500.
3.  10.   7.   8.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -250.1
3.  10.   7.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1552.1
3.  10.   7.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -8922.2
3.  10.   7.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -50224.7
3.  10.   7.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -280631.6
3.  10.   7.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE    -1562794.0
3.  10.   9.   2.   1    0.15    0.86    1.00         122.       2899.          0.      84041.     20587024.
3.  10.   9.   4.   4.    0.15    0.86    1.00         122.       2899.       4980.      48455.     13689803.
3.  10.   9.   6.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -194.1
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3.  10.   9.   8.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -2026.1
3.  10.   9.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -18938.0
3.  10.   9.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -173249.5
3.  10.   9.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1574863.0
3.  10.   9.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       **********
3.  10.   9.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       **********
3.  10.  11.   2.    T    0.15   0.86   1.00        122.      2899.        0.      68177.      17414128.
3.  10.  11.   4.   1.    0.15   0.86   1.00        122.      2899.      4980.      58595.      15717817.  <-
3.  10.  11.   6.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -963.7
3.  10.  11.   8.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -14958.1
3.  10.  11.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -223363.4
3.  10.  11.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -3308678.0
3.  10.  11.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       **********
3.  10.  11.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       **********
3.  10.  11.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       **********
4.   6.   7.   2.   4.    0.22   0.33   1.00        195.      1074.      6542.      96840.      23266720.
4.   6.   7.   4.   2.    0.22   0.33   1.00        195.      1074.      6542.      80247.      19948224.  <-
4.   6.   7.   6.   1.    0.22   0.33   1.00        195.      1074.      6542.      89054.      21709664.
4.   6.   7.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
4.   6.   7.  10.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
4.   6.   7.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -103.5
4.   6.   7.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -182.8
4.   6.   7.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -321.0
4.   6.   7.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -564.7
4.   6.   9.   2.   3.    0.22   0.33   1.00        195.      1074.      6542.      86520.      21202848.
4.   6.   9.   4.   1.    0.22   0.33   1.00        195.      1074.      6542.      74997.      18898160.  <-
4.   6.   9.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
4.   6.   9.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
4.   6.   9.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -133.3
4.   6.   9.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -275.4
4.   6.   9.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -568.9
4.   6.   9.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1183.1
4.   6.   9.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -2481.6
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4.	6.	11.	2.	2.	0.22	0.33	1.00	195.	1074.	6542.	80484.	19995600.
4.	6.	11.	4.	1.	0.22	0.33	1.00	195.	1074.	6542.	72565.	18411792.
4.	6.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	6.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-123.9
4.	6.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-300.7
4.	6.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-730.8
4.	6.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1796.4
4.	6.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4472.9
4.	6.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-11268.4
4.	8.	7.	2.	4.	0.22	0.37	1.00	195.	1206.	5757.	91992.	22417200.
4.	8.	7.	4.	2.	0.22	0.37	1.00	195.	1206.	5757.	73504.	18719536.
4.	8.	7.	6.	1.	0.22	0.37	1.00	195.	1206.	5757.	69416.	17901968.
4.	8.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-130.9
4.	8.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-249.2
4.	8.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-473.4
4.	8.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-902.5
4.	8.	9.	2.	3.	0.22	0.37	1.00	195.	1206.	5757.	80655.	20149808.
4.	8.	9.	4.	1.	0.22	0.37	1.00	195.	1206.	5757.	67963.	17611360.
4.	8.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-174.1
4.	8.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-397.2
4.	8.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-909.6
4.	8.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2102.0
4.	8.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4905.0
4.	8.	11.	2.	3.	0.22	0.37	1.00	195.	1206.	5757.	73996.	18817904.
4.	8.	11.	4.	1.	0.22	0.37	1.00	195.	1206.	5757.	65497.	17118128.
4.	8.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	8.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-168.2
4.	8.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-438.8
4.	8.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1019.6

4.	8.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-3387.1
4.	8.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-9610.1
4.	8.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-27586.2
4.	10.	7.	2.	1	0.22	0.86	1.00	195.	2210.	0.	89328.	22364480.
4.	10.	7.	4.	1	0.22	0.86	1.00	195.	2210.	0.	50483.	14595362.
4.	10.	7.	6.	2.	0.22	0.86	1.00	195.	2210.	4980.	44243.	13567410.
4.	10.	7.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-197.0
4.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-1273.2
4.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-7411.5
4.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-41887.7
4.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-234087.5
4.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-1301114.0
4.	10.	9.	2.	1	0.22	0.86	1.00	195.	2210.	0.	68715.	18241728.
4.	10.	9.	4.	5.	0.22	0.86	1.00	195.	2210.	4980.	40350.	12788787.
4.	10.	9.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-153.7
4.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-1681.7
4.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-15870.6
4.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-145295.6
4.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-1316980.0
4.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	**********
4.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	**********
4.	10.	11.	2.	1	0.22	0.86	1.00	195.	2210.	0.	55604.	15619620.
4.	10.	11.	4.	2.	0.22	0.86	1.00	195.	2210.	4980.	43639.	13446567.
4.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-801.7
4.	10.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-12611.0
4.	10.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-188224.5
4.	10.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	-2774555.0
4.	10.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	**********
4.	10.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	**********
4.	10.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING						VALUE	**********
5.	6.	7.	2.	4.	0.25	0.33	1.00	316.	1033.	6542.	103467.	25312224.
5.	6.	7.	4.	2.	0.25	0.33	1.00	316.	1033.	6542.	86891.	21996944.
5.	6.	7.	6.	1.	0.25	0.33	1.00	316.	1033.	6542.	82437.	21106160.

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5.  6.  7.  8.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  6.  7. 10.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  6.  7. 12.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -98.7
5.  6.  7. 14.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -173.3
5.  6.  7. 16.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -302.6
5.  6.  7. 18.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -529.1
5.  6.  9.  2.  3.   0.25   0.33   1.00        316.      1033.      6542.     91440.     22906704.
5.  6.  9.  4.  1.   0.25   0.33   1.00        316.      1033.      6542.     79481.     20515024. <
5.  6.  9.  6.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  6.  9.  8.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  6.  9. 10.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -127.0
5.  6.  9. 12.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -260.4
5.  6.  9. 14.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -533.8
5.  6.  9. 16.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -1101.9
5.  6.  9. 18.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -2294.6
5.  6. 11.  2.  2.   0.25   0.33   1.00        316.      1033.      6542.     84264.     21471616.
5.  6. 11.  4.  1.   0.25   0.33   1.00        316.      1033.      6542.     75478.     19714384. <<
5.  6. 11.  6.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  6. 11.  8.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -118.3
5.  6. 11. 10.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -284.5
5.  6. 11. 12.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -685.0
5.  6. 11. 14.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -1668.7
5.  6. 11. 16.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -4119.0
5.  6. 11. 18.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -10291.4
5.  8.  7.  2.  4.   0.25   0.37   1.00        316.      1110.      5757.     96771.     24093024.
5.  8.  7.  4.  2.   0.25   0.37   1.00        316.      1110.      5757.     79339.     20606640.
5.  8.  7.  6.  1.   0.25   0.37   1.00        316.      1110.      5757.     75011.     19741072. <
5.  8.  7.  8.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  8.  7. 10.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
5.  8.  7. 12.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -124.5
5.  8.  7. 14.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -235.6
5.  8.  7. 16.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -444.9
5.  8.  7. 18.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -843.0
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5.	8.	9.	2.	3.	0.25	0.37	1.00	316.	1110.	5757.	84174.	21573552.
5.	8.	9.	4.	2.	0.25	0.37	1.00	316.	1110.	5757.	71873.	19113344. ←
5.	8.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	8.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	8.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-165.4
5.	8.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-374.4
5.	8.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-850.8
5.	8.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1951.3
5.	8.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4520.0
5.	8.	11.	2.	3.	0.25	0.37	1.00	316.	1110.	5757.	76664.	20071552.
5.	8.	11.	4.	1.	0.25	0.37	1.00	316.	1110.	5757.	67975.	18333712. ←
5.	8.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	8.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-152.5
5.	8.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-413.9
5.	8.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1131.1
5.	8.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3136.0
5.	8.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8820.4
5.	8.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-25112.3
5.	10.	7.	2.	1	0.25	0.86	1.00	316.	1797.	0.	83441.	21906896.
5.	10.	7.	4.	1	0.25	0.86	1.00	316.	1797.	0.	51934.	15605651.
5.	10.	7.	6.	3.	0.25	0.86	1.00	316.	1797.	4980.	45745.	14587896. ←
5.	10.	7.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-168.5
5.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1124.7
5.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-6614.2
5.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-37525.3
5.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-209939.0
5.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1166492.0
5.	10.	9.	2.	1	0.25	0.86	1.00	316.	1797.	0.	64183.	18055392.
5.	10.	9.	4.	6.	0.25	0.86	1.00	316.	1797.	4980.	40554.	13549568. ←
5.	10.	9.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-132.0
5.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1498.4
5.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-14256.8
5.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-130749.4

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5.  10.   9.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -1184235.0
5.  10.   9.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
5.  10.   9.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
5.  10.  11.   2.   1    0.25    0.86    1.00         316.       1797.          0.       51936.      15606032.
5.  10.  11.   4.   2.   0.25    0.86    1.00         316.       1797.       4980.       41017.      13642100. <-
5.  10.  11.   6.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -715.1
5.  10.  11.   8.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -11373.9
5.  10.  11.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -169950.3
5.  10.  11.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE    -2500444.0
5.  10.  11.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
5.  10.  11.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
5.  10.  11.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      **********
6.   8.   7.   2.   4.   0.33    0.37    1.00         522.       1057.       5757.      108440.      28035952.
6.   8.   7.   4.   2.   0.33    0.37    1.00         522.       1057.       5757.       90661.      24480224.
6.   8.   7.   6.   1.   0.33    0.37    1.00         522.       1057.       5757.       85178.      23383600. <-
6.   8.   7.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
6.   8.   7.  10.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
6.   8.   7.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -111.2
6.   8.   7.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -207.6
6.   8.   7.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -386.7
6.   8.   7.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -722.7
6.   8.   9.   2.   3.   0.33    0.37    1.00         522.       1057.       5757.       92786.      24905264.
6.   8.   9.   4.   2.   0.33    0.37    1.00         522.       1057.       5757.       79420.      22232048. <-
6.   8.   9.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
6.   8.   9.   8.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
6.   8.   9.  10.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -147.5
6.   8.   9.  12.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -328.0
6.   8.   9.  14.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -732.2
6.   8.   9.  16.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -1650.4
6.   8.   9.  18.    *    INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -3759.9
6.   8.  11.   2.   3.   0.33    0.37    1.00         522.       1057.       5757.       83235.      22994944.
6.   8.  11.   4.   1.   0.33    0.37    1.00         522.       1057.       5757.       72771.      20902128. <- <= NA
6.   8.  11.   6.    *    NO CONVERGENCE WITHIN 20 ITERATIONS
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6.	8.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-136.7
6.	8.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-363.2
6.	8.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-971.2
6.	8.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2637.5
6.	8.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-7274.1
6.	8.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-20332.1
6.	10.	7.	2.	I	0.33	0.86	1.00	522.	1563.	0.	89345.	24697072.
6.	10.	7.	4.	I	0.33	0.86	1.00	522.	1563.	0.	62102.	19248304.
6.	10.	7.	6.	5.	0.33	0.86	1.00	522.	1563.	4980.	53886.	17825216. ←
6.	10.	7.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-108.1
6.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-813.3
6.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4958.4
6.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-28552.2
6.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-160732.6
6.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-894693.4
6.	10.	9.	2.	I	0.33	0.86	1.00	522.	1563.	0.	68692.	20566400.
6.	10.	9.	4.	I	0.33	0.86	1.00	522.	1563.	0.	47660.	16359920. ←
6.	10.	9.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-86.0
6.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1114.4
6.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-10916.8
6.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-101009.3
6.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-916056.3
6.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8227744.0
6.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
6.	10.	11.	2.	I	0.33	0.86	1.00	522.	1563.	0.	55561.	17940112.
6.	10.	11.	4.	3.	0.33	0.86	1.00	522.	1563.	4980.	42155.	15478997. ← ←
6.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-532.8
6.	10.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8808.4
6.	10.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-132615.5
6.	10.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1948488.0
6.	10.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
6.	10.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
6.	10.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********

7.	8.	7.	2.	4.	0.36	0.37	1.00	684.	1033.	5757.	118716.	30811120.
7.	8.	7.	4.	2.	0.36	0.37	1.00	684.	1033.	5757.	100857.	27239456.
7.	8.	7.	6.	1.	0.36	0.37	1.00	684.	1033.	5757.	94986.	26065104. ←
7.	8.	7.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	7.	10.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-105.7
7.	8.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-196.2
7.	8.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-363.2
7.	8.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-674.6
7.	8.	9.	2.	3.	0.36	0.37	1.00	684.	1033.	5757.	100590.	27185888.
7.	8.	9.	4.	2.	0.36	0.37	1.00	684.	1033.	5757.	86867.	24441312. ←
7.	8.	9.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	9.	8.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-140.1
7.	8.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-309.2
7.	8.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-684.7
7.	8.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1531.4
7.	8.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3462.6
7.	8.	11.	2.	3.	0.36	0.37	1.00	684.	1033.	5757.	89426.	24953232.
7.	8.	11.	4.	1.	0.36	0.37	1.00	684.	1033.	5757.	78350.	22737952. ← ←
7.	8.	11.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	8.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-130.2
7.	8.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-342.6
7.	8.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-07.5
7.	8.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2441.5
7.	8.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-6674.1
7.	8.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-18501.6
7.	10.	7.	2.	I	0.36	0.86	1.00	684.	1418.	0.	95784.	26704768.
7.	10.	7.	4.	I	0.36	0.86	1.00	684.	1418.	0.	71130.	21774080.
7.	10.	7.	6.	I	0.36	0.86	1.00	684.	1418.	0.	62941.	20136144. ←
7.	10.	7.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-82.8
7.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-684.1
7.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4277.9

7.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-24898.9
7.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-140883.4
7.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-786043.8
7.	10.	9.	2.	I	0.36	0.86	1.00	684.	1418.	0.	73706.	22289136.
7.	10.	9.	4.	I	0.36	0.86	1.00	684.	1418.	0.	54689.	18485872. ←
7.	10.	9.	6.	2.	0.36	0.86	1.00	684.	1418.	4980.	57050.	19178080.
7.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-955.2
7.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-9548.9
7.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-88974.0
7.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-808789.9
7.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-7265342.0
7.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
7.	10.	11.	2.	I	0.36	0.86	1.00	684.	1418.	0.	59669.	19481728.
7.	10.	11.	4.	4.	0.36	0.86	1.00	684.	1418.	4980.	46397.	17047456. ← ←
7.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-456.8
7.	10.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-7755.5
7.	10.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-117516.8
7.	10.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1728422.0
7.	10.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
7.	10.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
7.	10.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********
8.	10.	7.	2.	I	0.37	0.86	1.00	1008.	1247.	0.	113179.	31623760.
8.	10.	7.	4.	I	0.37	0.86	1.00	1008.	1247.	0.	91514.	27290768.
8.	10.	7.	6.	I	0.37	0.86	1.00	1008.	1247.	0.	84318.	25851536. ←
8.	10.	7.	8.	2.	0.37	0.86	1.00	1008.	1247.	4980.	88862.	26980400.
8.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-661.4
8.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4158.5
8.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-24259.8
8.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-137422.2
8.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-767157.2
8.	10.	9.	2.	I	0.37	0.86	1.00	1008.	1247.	0.	87320.	26452064.
8.	10.	9.	4.	I	0.37	0.86	1.00	1008.	1247.	0.	70612.	23110336. ← ←
8.	10.	9.	6.	2.	0.37	0.86	1.00	1008.	1247.	4980.	73066.	23821152.

8.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-927.2
8.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-9309.1
8.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-86872.7
8.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-790138.7
8.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-7098681.0
8.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								**********
8.	10.	11.	2.	I	0.37	0.86	1.[illegible]		1008.	1247.		0.	70876.	23163264. ←
8.	10.	11.	4.	1.	0.37	0.86	1.00		1008.	1247.		4980.	86911.	26590240.
8.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-443.4
8.	10.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-7570.8
8.	10.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-114881.4
8.	10.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-1690208.0
8.	10.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								**********
8.	10.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								**********
8.	10.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								**********
9.	10.	7.	2.	I	0.44	0.86	1.00		1402.	1164.		0.	138027.	38393328.
9.	10.	7.	4.	I	0.44	0.86	1.00		1402.	1164.		0.	117923.	34372608.
9.	10.	7.	6.	I	0.44	0.86	1.00		1402.	1164.		0.	111256.	33039200.
9.	10.	7.	8.	3.	0.44	0.86	1.00		1402.	1164.		4980.	109924.	32992752. ←
9.	10.	7.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-391.9
9.	10.	7.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-2753.0
9.	10.	7.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-16787.4
9.	10.	7.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-97206.6
9.	10.	7.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-549059.8
9.	10.	9.	2.	I	0.44	0.86	1.00		1402.	1164.		0.	106574.	32102848.
9.	10.	9.	4.	I	0.44	0.86	1.00		1402.	1164.		0.	91100.	29008000.
9.	10.	9.	6.	3.	0.44	0.86	1.00		1402.	1164.		4980.	88243.	28656672. ←
9.	10.	9.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-595.3
9.	10.	9.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-6493.6
9.	10.	9.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-62406.4
9.	10.	9.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-574683.3
9.	10.	9.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								-5187921.0
9.	10.	9.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE								**********

9.	10.	11.	2.	I	0.44	0.86	1.00	1402.	1164.	0.	86574.	28102848.	
9.	10.	11.	4.	I	0.44	0.86	1.00	1402.	1164.	0.	74049.	25597872.	← ∈
9.	10.	11.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-284.3	
9.	10.	11.	8.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5399.5	
9.	10.	11.	10.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-84210.1	
9.	10.	11.	12.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1249656.0	
9.	10.	11.	14.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********	
9.	10.	11.	16.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********	
9.	10.	11.	18.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							**********	

TABLE 5

EXAMPLE RESULTS 3

LIST OF INPUT DATA

```
      7.00        12.00        15.50
      2.00         2.00         2.00
     10.00       500.00      1000.00
      0.0         10.00        10.00
      0.01         0.10         0.75
     20.00         2.00         1.00
      2.00        10.00         1.00
      3.00        11.00         2.00
     12.00        15.00         1.00
      1.00         7.00         1.00
  50000.00        10.00       500.00
     12.00
      0.70
      0.15
     20.00
      7.00
     20.00
       1.000000      1.000000      1.500000      1.500000
       1.500000      1.500000      1.500000      1.500000
       2.000000      2.000000      2.000000      2.000000
       1.000000
   20000.000000  20000.000000  28000.000000  40000.000000
   40000.000000  89400.000000  40000.000000  80000.000000
  100000.000000 600000.000000 100000.000000 100000.000000
   20000.000000
       0.001020      0.000660      0.000550      0.001060
       0.000500      0.000280      0.000210      0.000450
       0.000120      0.000120      0.000010      0.000130
       0.001000
       0.001000      0.000900      0.001180      0.001260
       0.000700      0.001540      0.000670      0.000120
       0.001470      0.008570      0.001390      0.001350
       0.020150
       0.300000      0.300000      0.300000      0.300000
       0.500000      0.300000      0.300000      0.300000
       0.300000      1.000000      1.000000      2.000000
       0.200000
```

INPUT DATA DESCRIPTION

PAY RATE($/HR) AT TESTER	7.00	12.00	15.50
NO. MEN TO OPERATE TESTER	2.00	2.00	2.00
COST OF SHIPPING TO TESTER	10.00	500.00	1000.00
COST OF PACKING TO SHIP TO TESTER	0.0	10.00	10.00
TURNAROUND TIME(YRS) TO TEST ITEM	0.01	0.10	0.75
NUMBER OF TESTERS	20.00	2.00	1.00
NO. TESTER1 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	2.	10.	1.
NO. TESTER2 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	3.	11.	2.
NO. CYCLES BETWEEN FIRST ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)	12.	15.	1.

NO. X(CYCLES BETWEEN FIRST ECHELON TESTS)	1.	7.	1.
CYCLES BETWEEN SECOND ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)			
ITEM COST,ITEM LIFECYCLE,NO. OF ITEMS	50000.	10.	500.

NO. ITEM FUNCTIONS TESTED	12.
FRACTION OF ITEMS IN USE NOT DEFECTIVE	0.70
REPAIR MATERIAL RATIO	0.15
NO. USE CYCLES	20.
INITIAL VALVE FOR NEWTON-RAPHSON METHOD	7.
MAXIMUM NO. ITERATIONS FOR N-R METHOD	20.

TIME REQD TO REPAIR EQUIP. WHICH TESTS ITH FUN	1.000000	1.000000	1.500000	1.500000
	1.500000	1.500000	1.500000	1.500000
	2.000000	2.000000	2.000000	2.000000
	1.000000			
COST OF EQUIPMENT TO TEST ITH FUNCTION	20000.000000	20000.000000	28000.000000	40000.000000
	40000.000000	89400.000000	40000.000000	80000.000000
	100000.000000	600000.000000	100000.000000	100000.000000
	20000.000000			
FAILURE RATE OF EQUIP. TO TEST ITH FUNCTION	0.001020	0.000660	0.000550	0.001060
	0.000500	0.000280	0.000210	0.000450
	0.000120	0.000120	0.000010	0.000130
	0.001000			
FAILURE RATE OF ITH FUNCTION OF ITEM	0.001000	0.000900	0.001180	0.001260
	0.000700	0.001540	0.000670	0.000120
	0.001470	0.008570	0.001390	0.001350
	0.020150			
TIME REQD TO TEST ITH FUNCTION	0.300000	0.300000	0.300000	0.300000
	0.500000	0.300000	0.300000	0.300000
	0.300000	1.000000	1.000000	2.000000
	0.200000			

TEST COST SUMMARY

FUNCTIONS M1	FUNCTIONS M2	CYCLES N1	CYCLES N2	CYCLES N3	DEFECTIVE ITEMS FAILING TEST1	TEST2	TEST3	TEST1 COST	TEST2 COST	TEST3 COST	COMPLETE TEST COST	LIFE CYCLE COST
2.	3.	12.	1.	4.	0.09	0.15	1.00	91.	1028.	9317.	141191.	30743520.
2.	3.	12.	2.	2.	0.09	0.15	1.00	91.	1028.	9317.	121649.	26835200.
2.	3.	12.	3.	1.	0.09	0.15	1.00	91.	1028.	9317.	116268.	25758944.
2.	3.	12.	4.	1.	0.09	0.15	1.00	91.	1028.	9317.	114466.	25398608.
2.	3.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

2.	3.	12.	7.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	13.	1.	3.	0.09	0.15	1.00	91.	1028.	9317.	137959.	30097088.
2.	3.	13.	2.	2.	0.09	0.15	1.00	91.	1028.	9317.	120215.	26548384.
2.	3.	13.	3.	1.	0.09	0.15	1.00	91.	1028.	9317.	115544.	25614112.
2.	3.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	13.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	13.	7.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	14.	1.	3.	0.09	0.15	1.00	91.	1028.	9317.	135241.	29553552.
2.	3.	14.	2.	2.	0.09	0.15	1.00	91.	1028.	9317.	119063.	26318064.
2.	3.	14.	3.	1.	0.09	0.15	1.00	91.	1028.	9317.	115028.	25510944.
2.	3.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	14.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	14.	7.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	15.	1.	3.	0.09	0.15	1.00	91.	1028.	9317.	132936.	29092512.
2.	3.	15.	2.	1.	0.09	0.15	1.00	91.	1028.	9317.	118139.	26133104.
2.	3.	15.	3.	1.	0.09	0.15	1.00	91.	1028.	9317.	114680.	25441312.
2.	3.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	15.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	15.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	3.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-82.9
2.	5.	12.	1.	4.	0.09	0.25	1.00	91.	1119.	7050.	109909.	24567248.
2.	5.	12.	2.	2.	0.09	0.25	1.00	91.	1119.	7050.	90151.	20615552.
2.	5.	12.	3.	1.	0.09	0.25	1.00	91.	1119.	7050.	86089.	19803184.
2.	5.	12.	4.	1.	0.09	0.25	1.00	91.	1119.	7050.	86257.	19836752.
2.	5.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	5.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	5.	12.	7.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	5.	13.	1.	4.	0.09	0.25	1.00	91.	1119.	7050.	106458.	23876944.
2.	5.	13.	2.	2.	0.09	0.25	1.00	91.	1119.	7050.	88829.	20351168.
2.	5.	13.	3.	1.	0.09	0.25	1.00	91.	1119.	7050.	85773.	19739984.
2.	5.	13.	4.	1.	0.09	0.25	1.00	91.	1119.	7050.	67702.	16125787.

2.	5.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	13.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-101.0
2.	5.	14.	1.	3.	0.09	0.25	1.00	91.	1119.	7050.	103566.	23298544.
2.	5.	14.	2.	2.	0.09	0.25	1.00	91.	1119.	7050.	87822.	20149840.
2.	5.	14.	3.	1.	0.09	0.25	1.00	91.	1119.	7050.	85709.	19727136.
2.	5.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	14.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-126.4
2.	5.	15.	1.	3.	0.09	0.25	1.00	91.	1119.	7050.	101123.	22809952.
2.	5.	15.	2.	1.	0.09	0.25	1.00	91.	1119.	7050.	87071.	19999616.
2.	5.	15.	3.	1.	0.09	0.25	1.00	91.	1119.	7050.	85854.	19756272.
2.	5.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	15.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	5.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-98.1
2.	5.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-157.8
2.	7.	12.	1.	5.	0.09	0.36	1.00	91.	1320.	6227.	99182.	22551184.
2.	7.	12.	2.	2.	0.09	0.36	1.00	91.	1320.	6227.	76892.	18093136.
2.	7.	12.	3.	1.	0.09	0.36	1.00	91.	1320.	6227.	73685.	17451824.
2.	7.	12.	4.	1.	0.09	0.36	1.00	91.	1320.	6227.	76318.	17978400.
2.	7.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	7.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	7.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-150.8
2.	7.	13.	1.	4.	0.09	0.36	1.00	91.	1320.	6227.	95178.	21750304.
2.	7.	13.	2.	2.	0.09	0.36	1.00	91.	1320.	6227.	75558.	17826336.
2.	7.	13.	3.	1.	0.09	0.36	1.00	91.	1320.	6227.	81245.	18963760.
2.	7.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	7.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
2.	7.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-113.9
2.	7.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-209.3
2.	7.	14.	1.	4.	0.09	0.36	1.00	91.	1320.	6227.	91829.	21080576.
2.	7.	14.	2.	2.	0.09	0.36	1.00	91.	1320.	6227.	74608.	17636352.

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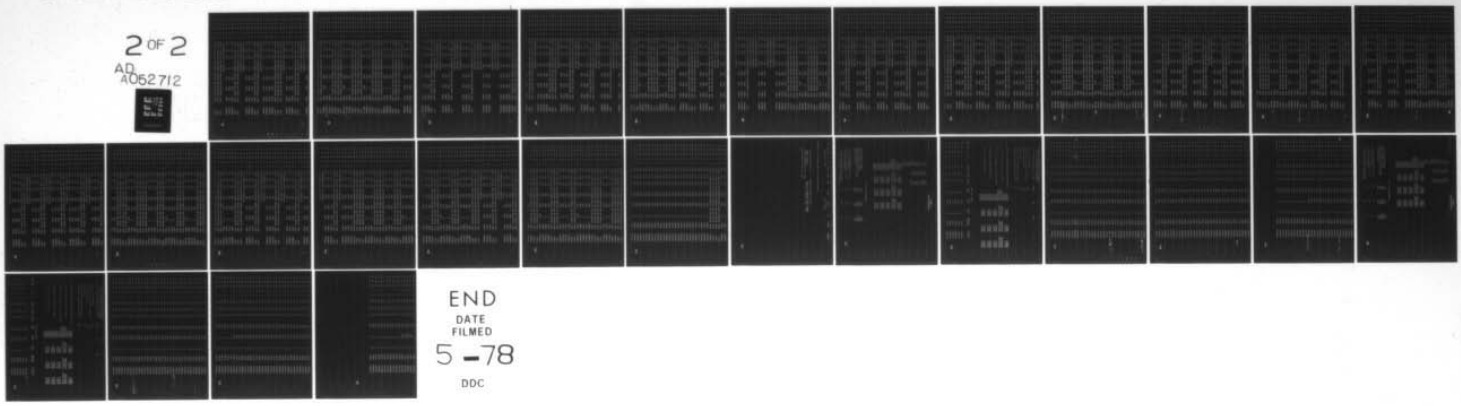

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2.	7.	14.	3.	1.	0.09	0.36	1.00	91.	1320.	6227.	74373.	17589376.
2.	7.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	7.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	7.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-151.3
2.	7.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-290.2
2.	7.	15.	1.	4.	0.09	0.36	1.00	91.	1320.	6227.	89007.	20516256.
2.	7.	15.	2.	2.	0.09	0.36	1.00	91.	1320.	6227.	73976.	17509936.
2.	7.	15.	3.	1.	0.09	0.36	1.00	91.	1320.	6227.	68222.	16359250.
2.	7.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	7.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-99.1
2.	7.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-200.5
2.	7.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-402.1
2.	9.	12.	1.	5.	0.09	0.44	1.00	91.	1754.	5542.	104638.	23822448.
2.	9.	12.	2.	2.	0.09	0.44	1.00	91.	1754.	5542.	74030.	17700784.
2.	9.	12.	3.	1.	0.09	0.44	1.00	91.	1754.	5542.	84314.	19757680.
2.	9.	12.	4.	1.	0.09	0.44	1.00	91.	1754.	5542.	60092.	14913247.
2.	9.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	9.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-127.0
2.	9.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-255.6
2.	9.	13.	1.	5.	0.09	0.44	1.00	91.	1754.	5542.	99259.	22746608.
2.	9.	13.	2.	2.	0.09	0.44	1.00	91.	1754.	5542.	72137.	17322256.
2.	9.	13.	3.	1.	0.09	0.44	1.00	91.	1754.	5542.	69206.	16736087.
2.	9.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	9.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	9.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-180.7
2.	9.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-384.1
2.	9.	14.	1.	5.	0.09	0.44	1.00	91.	1754.	5542.	94737.	21842272.
2.	9.	14.	2.	2.	0.09	0.44	1.00	91.	1754.	5542.	70749.	17044608.
2.	9.	14.	3.	1.	0.09	0.44	1.00	91.	1754.	5542.	69871.	16868912.
2.	9.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	9.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-113.4
2.	9.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-256.5
2.	9.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-577.3

2.	9.	15.	1.	4.	0.09	0.44	1.00	91.	1754.	5542.	90904.	21075680.
2.	9.	15.	2.	2.	0.09	0.44	1.00	91.	1754.	5542.	69781.	16851040.
2.	9.	15.	3.	1.	0.09	0.44	1.00	91.	1754.	5542.	71017.	17098272.
2.	9.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
2.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-152.3
2.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-363.8
2.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-868.5
2.	11.	12.	1.	I	0.09	0.93	1.00	91.	4420.	0.	183775.	40229808.
2.	11.	12.	2.	I	0.09	0.93	1.00	91.	4420.	0.	92747.	22024256.
2.	11.	12.	3.	I	0.09	0.93	1.00	91.	4420.	0.	62410.	15956825.
2.	11.	12.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-164.3
2.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1110.2
2.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5917.1
2.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-29607.6
2.	11.	13.	1.	I	0.09	0.93	1.00	91.	4420.	0.	169323.	37339440.
2.	11.	13.	2.	I	0.09	0.93	1.00	91.	4420.	0.	85378.	20550464.
2.	11.	13.	3.	3.	0.09	0.93	1.00	91.	4420.	4873.	63363.	16267403.
2.	11.	13.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-331.3
2.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2270.0
2.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-13344.0
2.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-75087.2
2.	11.	14.	1.	I	0.09	0.93	1.00	91.	4420.	0.	156936.	34862080.
2.	11.	14.	2.	I	0.09	0.93	1.00	91.	4420.	0.	79063.	19287296.
2.	11.	14.	3.	1.	0.09	0.93	1.00	91.	4420.	4873.	80900.	19774752.
2.	11.	14.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-623.5
2.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4546.0
2.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-29810.8
2.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-189486.6
2.	11.	15.	1.	I	0.09	0.93	1.00	91.	4420.	0.	146202.	32715120.
2.	11.	15.	2.	I	0.09	0.93	1.00	91.	4420.	0.	73589.	18192672.
2.	11.	15.	3.	1.	0.09	0.93	1.00	91.	4420.	4873.	73294.	18253520.
2.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1130.6
2.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8988.8

2.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-66204.7
2.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-476722.7
3.	5.	12.	1.	4.	0.15	0.25	1.00	122.	1072.	7050.	108729.	24835184.
3.	5.	12.	2.	1.	0.15	0.25	1.00	122.	1072.	7050.	158782.	34845808.
3.	5.	12.	3.	1.	0.15	0.25	1.00	122.	1072.	7050.	83600.	19809296.
3.	5.	12.	4.	1.	0.15	0.25	1.00	122.	1072.	7050.	82165.	19522368.
3.	5.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	12.	7.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	13.	1.	4.	0.15	0.25	1.00	122.	1072.	7050.	105326.	24154544.
3.	5.	13.	2.	2.	0.15	0.25	1.00	122.	1072.	7050.	87316.	20552656.
3.	5.	13.	3.	1.	0.15	0.25	1.00	122.	1072.	7050.	82910.	19671312.
3.	5.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	13.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-94.1
3.	5.	14.	1.	3.	0.15	0.25	1.00	122.	1072.	7050.	102476.	23584480.
3.	5.	14.	2.	2.	0.15	0.25	1.00	122.	1072.	7050.	86145.	20318416.
3.	5.	14.	3.	1.	0.15	0.25	1.00	122.	1072.	7050.	82460.	19581280.
3.	5.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	14.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-117.4
3.	5.	15.	1.	3.	0.15	0.25	1.00	122.	1072.	7050.	100069.	23103152.
3.	5.	15.	2.	2.	0.15	0.25	1.00	122.	1072.	7050.	85227.	20134832.
3.	5.	15.	3.	1.	0.15	0.25	1.00	122.	1072.	7050.	82207.	19530752.
3.	5.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	15.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	5.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-91.7
3.	5.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-146.0
3.	7.	12.	1.	5.	0.15	0.36	1.00	122.	1216.	6227.	95600.	22338688.
3.	7.	12.	2.	2.	0.15	0.36	1.00	122.	1216.	6227.	74443.	18107472.
3.	7.	12.	3.	1.	0.15	0.36	1.00	122.	1216.	6227.	70380.	17294864.

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3.	7.	12.	4.	1.	0.15	0.36	1.00	122.	1216.	6227.	71094.	17437504.
3.	7.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-139.9
3.	7.	13.	1.	4.	0.15	0.36	1.00	122.	1216.	6227.	91826.	21584032.
3.	7.	13.	2.	2.	0.15	0.36	1.00	122.	1216.	6227.	73030.	17824880.
3.	7.	13.	3.	1.	0.15	0.36	1.00	122.	1216.	6227.	70149.	17248576.
3.	7.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-106.2
3.	7.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-193.5
3.	7.	14.	1.	4.	0.15	0.36	1.00	122.	1216.	6227.	88676.	20954000.
3.	7.	14.	2.	2.	0.15	0.36	1.00	122.	1216.	6227.	71982.	17615280.
3.	7.	14.	3.	1.	0.15	0.36	1.00	122.	1216.	6227.	70230.	17264736.
3.	7.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-140.7
3.	7.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-267.1
3.	7.	15.	1.	4.	0.15	0.36	1.00	122.	1216.	6227.	86027.	20424112.
3.	7.	15.	2.	2.	0.15	0.36	1.00	122.	1216.	6227.	71234.	17465600.
3.	7.	15.	3.	1.	0.15	0.36	1.00	122.	1216.	6227.	70581.	17334960.
3.	7.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	7.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-92.9
3.	7.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-185.8
3.	7.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-368.7
3.	9.	12.	1.	5.	0.15	0.44	1.00	122.	1552.	5542.	96842.	22767152.
3.	9.	12.	2.	2.	0.15	0.44	1.00	122.	1552.	5542.	69567.	17312272.
3.	9.	12.	3.	1.	0.15	0.44	1.00	122.	1552.	5542.	64392.	16277178.
3.	9.	12.	4.	1.	0.15	0.44	1.00	122.	1552.	5542.	59708.	15340466.
3.	9.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	9.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-118.0
3.	9.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-235.4
3.	9.	13.	1.	5.	0.15	0.44	1.00	122.	1552.	5542.	92011.	21800912.

3.	9.	13.	2.	1.	0.15	0.44	1.00	122.	1552.	5542.	119188.	27236432.
3.	9.	13.	3.	1.	0.15	0.44	1.00	122.	1552.	5542.	64187.	16236171.
3.	9.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	9.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	9.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-167.4
3.	9.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-352.4
3.	9.	14.	1.	5.	0.15	0.44	1.00	122.	1552.	5542.	87959.	20990576.
3.	9.	14.	2.	2.	0.15	0.44	1.00	122.	1552.	5542.	66401.	16678912.
3.	9.	14.	3.	1.	0.15	0.44	1.00	122.	1552.	5542.	64407.	16280156.
3.	9.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	9.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-105.8
3.	9.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-236.9
3.	9.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-527.5
3.	9.	15.	1.	4.	0.15	0.44	1.00	122.	1552.	5542.	84534.	20305504.
3.	9.	15.	2.	2.	0.15	0.44	1.00	122.	1552.	5542.	65427.	16484143.
3.	9.	15.	3.	1.	0.15	0.44	1.00	122.	1552.	5542.	65010.	16400760.
3.	9.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
3.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-141.8
3.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-334.8
3.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-790.3
3.	11.	12.	1.	1	0.15	0.93	1.00	122.	3732.	0.	154960.	34970720.
3.	11.	12.	2.	1	0.15	0.93	1.00	122.	3732.	0.	78644.	19707584.
3.	11.	12.	3.	1	0.15	0.93	1.00	122.	3732.	0.	53217.	14622198.
3.	11.	12.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-121.5
3.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-915.4
3.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5010.9
3.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-25319.6
3.	11.	13.	1.	1	0.15	0.93	1.00	122.	3732.	0.	142614.	32501632.
3.	11.	13.	2.	1	0.15	0.93	1.00	122.	3732.	0.	72280.	18434688.
3.	11.	13.	3.	5.	0.15	0.93	1.00	122.	3732.	4873.	50005.	14099763.
3.	11.	13.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-262.2
3.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1907.9
3.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-11404.6

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3.  11.  13.  7.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -64533.0
3.  11.  14.  1.   I   0.15   0.93   1.00        122.      3732.         0.      132034.      30385536.
3.  11.  14.  2.   I   0.15   0.93   1.00        122.      3732.         0.       66826.      17343888.
3.  11.  14.  3.   2.  0.15   0.93   1.00        122.      3732.      4873.       54704.      15039507.
3.  11.  14.  4.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -511.4
3.  11.  14.  5.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -3868.6
3.  11.  14.  6.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -25635.1
3.  11.  14.  7.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -163366.6
3.  11.  15.  1.   I   0.15   0.93   1.00        122.      3732.         0.      122865.      28551792.
3.  11.  15.  2.   I   0.15   0.93   1.00        122.      3732.         0.       62100.      16398757.
3.  11.  15.  3.   1.  0.15   0.93   1.00        122.      3732.      4873.       82645.      20627728.
3.  11.  15.  4.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -947.5
3.  11.  15.  5.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE       -7714.6
3.  11.  15.  6.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE      -57170.1
3.  11.  15.  7.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE     -411797.0
4.   5.  12.  1.   4.  0.22   0.25   1.00        195.      1036.      7050.      109679.      25745104.
4.   5.  12.  2.   1.  0.22   0.25   1.00        195.      1036.      7050.      161618.      36133008.
4.   5.  12.  3.   1.  0.22   0.25   1.00        195.      1036.      7050.       83045.      20418464.
4.   5.  12.  4.   1.  0.22   0.25   1.00        195.      1036.      7050.       79823.      19774064.
4.   5.  12.  5.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
4.   5.  12.  6.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
4.   5.  12.  7.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
4.   5.  13.  1.   4.  0.22   0.25   1.00        195.      1036.      7050.      106161.      25041568.
4.   5.  13.  2.   2.  0.22   0.25   1.00        195.      1036.      7050.       87560.      21321280.
4.   5.  13.  3.   1.  0.22   0.25   1.00        195.      1036.      7050.       81879.      20185152.
4.   5.  13.  4.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
4.   5.  13.  5.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
4.   5.  13.  6.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
4.   5.  13.  7.   *   INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING  VALUE        -87.3
4.   5.  14.  1.   3.  0.22   0.25   1.00        195.      1036.      7050.      103213.      24451920.
4.   5.  14.  2.   1.  0.22   0.25   1.00        195.      1036.      7050.      136496.      31108624.
4.   5.  14.  3.   1.  0.22   0.25   1.00        195.      1036.      7050.       80969.      20003168.
4.   5.  14.  4.   *   NO CONVERGENCE WITHIN 20 ITERATIONS
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4.	5.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	5.	14.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	5.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-108.4
4.	5.	15.	1.	3.	0.22	0.25	1.00	195.	1036.	7050.	100722.	23953680.
4.	5.	15.	2.	2.	0.22	0.25	1.00	195.	1036.	7050.	84918.	20792960.
4.	5.	15.	3.	1.	0.22	0.25	1.00	195.	1036.	7050.	80266.	19862656.
4.	5.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	5.	15.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	5.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-85.2
4.	5.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-134.3
4.	7.	12.	1.	5.	0.22	0.36	1.00	195.	1115.	6227.	93872.	22713248.
4.	7.	12.	2.	2.	0.22	0.36	1.00	195.	1115.	6227.	73779.	18694672.
4.	7.	12.	3.	1.	0.22	0.36	1.00	195.	1115.	6227.	68973.	17733472.
4.	7.	12.	4.	1.	0.22	0.36	1.00	195.	1115.	6227.	68166.	17571984.
4.	7.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	7.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	7.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-128.9
4.	7.	13.	1.	4.	0.22	0.36	1.00	195.	1115.	6227.	90194.	21977648.
4.	7.	13.	2.	2.	0.22	0.36	1.00	195.	1115.	6227.	72160.	18370752.
4.	7.	13.	3.	1.	0.22	0.36	1.00	195.	1115.	6227.	68267.	17592256.
4.	7.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	7.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	7.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-98.5
4.	7.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-177.6
4.	7.	14.	1.	4.	0.22	0.36	1.00	195.	1115.	6227.	87126.	21364016.
4.	7.	14.	2.	2.	0.22	0.36	1.00	195.	1115.	6227.	70907.	18120160.
4.	7.	14.	3.	1.	0.22	0.36	1.00	195.	1115.	6227.	67862.	17511136.
4.	7.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	7.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
4.	7.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-130.0
4.	7.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-244.3
4.	7.	15.	1.	4.	0.22	0.36	1.00	195.	1115.	6227.	84548.	20848336.
4.	7.	15.	2.	2.	0.22	0.36	1.00	195.	1115.	6227.	69952.	17929248.

4.	7.	15.	3.	1.	0.22	0.36	1.00	195.	1115.	6227.	67707.	17480272.
4.	7.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	7.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-86.5
4.	7.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-171.2
4.	7.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-335.7
4.	9.	12.	1.	5.	0.22	0.44	1.00	195.	1325.	5542.	89963.	22111312.
4.	9.	12.	2.	2.	0.22	0.44	1.00	195.	1325.	5542.	66464.	17411616.
4.	9.	12.	3.	1.	0.22	0.44	1.00	195.	1325.	5542.	61388.	16396343.
4.	9.	12.	4.	1.	0.22	0.44	1.00	195.	1325.	5542.	60987.	16316150.
4.	9.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	9.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-108.9
4.	9.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-215.1
4.	9.	13.	1.	5.	0.22	0.44	1.00	195.	1325.	5542.	85628.	21244400.
4.	9.	13.	2.	2.	0.22	0.44	1.00	195.	1325.	5542.	64646.	17047968.
4.	9.	13.	3.	1.	0.22	0.44	1.00	195.	1325.	5542.	60793.	16277402.
4.	9.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	9.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	9.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-153.9
4.	9.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-320.6
4.	9.	14.	1.	5.	0.22	0.44	1.00	195.	1325.	5542.	82002.	20519232.
4.	9.	14.	2.	2.	0.22	0.44	1.00	195.	1325.	5542.	63256.	16770075.
4.	9.	14.	3.	1.	0.22	0.44	1.00	195.	1325.	5542.	60572.	16233135.
4.	9.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	9.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-98.0
4.	9.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-217.1
4.	9.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-477.9
4.	9.	15.	1.	4.	0.22	0.44	1.00	195.	1325.	5542.	78946.	19908048.
4.	9.	15.	2.	2.	0.22	0.44	1.00	195.	1325.	5542.	62219.	16562602.
4.	9.	15.	3.	1.	0.22	0.44	1.00	195.	1325.	5542.	63493.	16817424.
4.	9.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
4.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-131.1
4.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-305.8
4.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-713.0

4.	11.	12.	1.	I	0.22	0.93	1.00	195.	2787.	0.	118346.	28367888.
4.	11.	12.	2.	I	0.22	0.93	1.00	195.	2787.	0.	61800.	17058800.
4.	11.	12.	3.	I	0.22	0.93	1.00	195.	2787.	0.	42969.	13292522.
4.	11.	12.	4.	1.	0.22	0.93	1.00	195.	2787.	4873.	55790.	15976887.
4.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-716.2
4.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4093.0
4.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-21016.9
4.	11.	13.	1.	I	0.22	0.93	1.00	195.	2787.	0.	108801.	26459072.
4.	11.	13.	2.	I	0.22	0.93	1.00	195.	2787.	0.	56722.	16043163.
4.	11.	13.	3.	I	0.22	0.93	1.00	195.	2787.	0.	39380.	12574873.
4.	11.	13.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-191.2
4.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1539.0
4.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-9448.7
4.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-53996.0
4.	11.	14.	1.	I	0.22	0.93	1.00	195.	2787.	0.	100623.	24823296.
4.	11.	14.	2.	I	0.22	0.93	1.00	195.	2787.	0.	52371.	15172960.
4.	11.	14.	3.	3.	0.22	0.93	1.00	195.	2787.	4873.	38570.	12532728.
4.	11.	14.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-396.3
4.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3180.9
4.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-21442.2
4.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-137422.1
4.	11.	15.	1.	I	0.22	0.93	1.00	195.	2787.	0.	93536.	23405952.
4.	11.	15.	2.	I	0.22	0.93	1.00	195.	2787.	0.	48602.	14419110.
4.	11.	15.	3.	2.	0.22	0.93	1.00	195.	2787.	4873.	45535.	13925766.
4.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-760.1
4.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-6425.6
4.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-48137.0
4.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-347631.6
5.	7.	12.	1.	5.	0.25	0.36	1.00	316.	1056.	6227.	96241.	23907056.
5.	7.	12.	2.	2.	0.25	0.36	1.00	316.	1056.	6227.	76799.	20018528.
5.	7.	12.	3.	1.	0.25	0.36	1.00	316.	1056.	6227.	71683.	18995376.
5.	7.	12.	4.	1.	0.25	0.36	1.00	316.	1056.	6227.	70227.	18704272.
5.	7.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

5.	7.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	7.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-123.1
5.	7.	13.	1.	4.	0.25	0.36	1.00	316.	1056.	6227.	92365.	23131776.
5.	7.	13.	2.	2.	0.25	0.36	1.00	316.	1056.	6227.	74815.	19621872.
5.	7.	13.	3.	1.	0.25	0.36	1.00	316.	1056.	6227.	88165.	22291840.
5.	7.	13.	4.	1.	0.25	0.36	1.00	316.	1056.	6227.	65940.	17846688.
5.	7.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	7.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-94.4
5.	7.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-169.3
5.	7.	14.	1.	4.	0.25	0.36	1.00	316.	1056.	6227.	89127.	22484224.
5.	7.	14.	2.	2.	0.25	0.36	1.00	316.	1056.	6227.	73237.	19306160.
5.	7.	14.	3.	1.	0.25	0.36	1.00	316.	1056.	6227.	80754.	20809648.
5.	7.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	7.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	7.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-124.4
5.	7.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-232.2
5.	7.	15.	1.	4.	0.25	0.36	1.00	316.	1056.	6227.	86402.	21939184.
5.	7.	15.	2.	2.	0.25	0.36	1.00	316.	1056.	6227.	71987.	19056112.
5.	7.	15.	3.	1.	0.25	0.36	1.00	316.	1056.	6227.	69040.	18466832.
5.	7.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	7.	15.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	7.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-163.5
5.	7.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-318.5
5.	9.	12.	1.	5.	0.25	0.44	1.00	316.	1186.	5542.	89114.	22661664.
5.	9.	12.	2.	3.	0.25	0.44	1.00	316.	1186.	5542.	67971.	18433072.
5.	9.	12.	3.	2.	0.25	0.44	1.00	316.	1186.	5542.	63126.	17464016.
5.	9.	12.	4.	1.	0.25	0.44	1.00	316.	1186.	5542.	62650.	17368736.
5.	9.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS						
5.	9.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-104.0
5.	9.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE						-204.4
5.	9.	13.	1.	5.	0.25	0.44	1.00	316.	1186.	5542.	84839.	21806528.
5.	9.	13.	2.	2.	0.25	0.44	1.00	316.	1186.	5542.	65918.	18022480.
5.	9.	13.	3.	1.	0.25	0.44	1.00	316.	1186.	5542.	62105.	17259824.

5.	9.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	9.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	9.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-146.8
5.	9.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-304.0
5.	9.	14.	1.	5.	0.25	0.44	1.00	316.	1186.	5542.	81264.	21091488.
5.	9.	14.	2.	2.	0.25	0.44	1.00	316.	1186.	5542.	64312.	17701200.
5.	9.	14.	3.	1.	0.25	0.44	1.00	316.	1186.	5542.	72286.	19296032.
5.	9.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	9.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-93.9
5.	9.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-206.7
5.	9.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-452.0
5.	9.	15.	1.	4.	0.25	0.44	1.00	316.	1186.	5542.	78252.	20489136.
5.	9.	15.	2.	1.	0.25	0.44	1.00	316.	1186.	5542.	101694.	25177584.
5.	9.	15.	3.	1.	0.25	0.44	1.00	316.	1186.	5542.	61168.	17072432.
5.	9.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
5.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-125.4
5.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-290.5
5.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-672.6
5.	11.	12.	1.	I	0.25	0.93	1.00	316.	2242.	0.	101085.	25635824.
5.	11.	12.	2.	I	0.25	0.93	1.00	316.	2242.	0.	55798.	16578381.
5.	11.	12.	3.	I	0.25	0.93	1.00	316.	2242.	0.	40721.	13562908.
5.	11.	12.	4.	2.	0.25	0.93	1.00	316.	2242.	4873.	44622.	14463155.
5.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-609.3
5.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3604.2
5.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-18742.5
5.	11.	13.	1.	I	0.25	0.93	1.00	316.	2242.	0.	92901.	23999072.
5.	11.	13.	2.	I	0.25	0.93	1.00	316.	2242.	0.	51206.	15660065.
5.	11.	13.	3.	I	0.25	0.93	1.00	316.	2242.	0.	37328.	12884362.
5.	11.	13.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-152.8
5.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1341.6
5.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8410.6
5.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-48448.8
5.	11.	14.	1.	I	0.25	0.93	1.00	316.	2242.	0.	85889.	22596512.

5.	11.	14.	2.	I	0.25	0.93	1.00	316.	2242.	0.	47273.	14873305.
5.	11.	14.	3.	6.	0.25	0.93	1.00	316.	2242.	4873.	34740.	12486797.
5.	11.	14.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-334.4
5.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2813.9
5.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-19224.4
5.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-123818.0
5.	11.	15.	1.	I	0.25	0.93	1.00	316.	2242.	0.	79813.	21381328.
5.	11.	15.	2.	I	0.25	0.93	1.00	316.	2242.	0.	43865.	14191802.
5.	11.	15.	3.	2.	0.25	0.93	1.00	316.	2242.	4873.	37800.	13098871.
5.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-659.5
5.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5739.8
5.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-43375.6
5.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-314120.0
6.	7.	12.	1.	5.	0.33	0.36	1.00	522.	1027.	6227.	102950.	26858048.
6.	7.	12.	2.	2.	0.33	0.36	1.00	522.	1027.	6227.	82945.	22857008.
6.	7.	12.	3.	2.	0.33	0.36	1.00	522.	1027.	6227.	76658.	21599536.
6.	7.	12.	4.	1.	0.33	0.36	1.00	522.	1027.	6227.	73796.	21027168.
6.	7.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	7.	12.	6.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	7.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-111.1
6.	7.	13.	1.	4.	0.33	0.36	1.00	522.	1027.	6227.	98511.	25970128.
6.	7.	13.	2.	1.	0.33	0.36	1.00	522.	1027.	6227.	140837.	34435456.
6.	7.	13.	3.	1.	0.33	0.36	1.00	522.	1027.	6227.	74528.	21173648.
6.	7.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	7.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	7.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-85.8
6.	7.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-152.0
6.	7.	14.	1.	4.	0.33	0.36	1.00	522.	1027.	6227.	94791.	25226096.
6.	7.	14.	2.	2.	0.33	0.36	1.00	522.	1027.	6227.	77959.	21859872.
6.	7.	14.	3.	1.	0.33	0.36	1.00	522.	1027.	6227.	72808.	20829664.
6.	7.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	7.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
6.	7.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-112.6

6. 7. 14. 7. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -207.5

6. 7. 15. 1. 4. 0.33 0.36 1.00 522. 1027. 6227. 91648. 24597568.

6. 7. 15. 2. 2. 0.33 0.36 1.00 522. 1027. 6227. 76101. 21488272.

6. 7. 15. 3. 1. 0.33 0.36 1.00 522. 1027. 6227. 71420. 20551888.

6. 7. 15. 4. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 7. 15. 5. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 7. 15. 6. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -147.4

6. 7. 15. 7. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -283.1

6. 9. 12. 1. 5. 0.33 0.44 1.00 522. 1107. 5542. 93776. 25203168.

6. 9. 12. 2. 3. 0.33 0.44 1.00 522. 1107. 5542. 73250. 21098032.

6. 9. 12. 3. 2. 0.33 0.44 1.00 522. 1107. 5542. 67580. 19963936.

6. 9. 12. 4. 1. 0.33 0.44 1.00 522. 1107. 5542. 65681. 19584176.

6. 9. 12. 5. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 9. 12. 6. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -93.8

6. 9. 12. 7. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -182.1

6. 9. 13. 1. 5. 0.33 0.44 1.00 522. 1107. 5542. 89099. 24267872.

6. 9. 13. 2. 2. 0.33 0.44 1.00 522. 1107. 5542. 70527. 20553424.

6. 9. 13. 3. 1. 0.33 0.44 1.00 522. 1107. 5542. 65645. 19577072.

6. 9. 13. 4. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 9. 13. 5. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 9. 13. 6. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -131.9

6. 9. 13. 7. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -269.4

6. 9. 14. 1. 5. 0.33 0.44 1.00 522. 1107. 5542. 85181. 23484256.

6. 9. 14. 2. 2. 0.33 0.44 1.00 522. 1107. 5542. 68318. 20111504.

6. 9. 14. 3. 1. 0.33 0.44 1.00 522. 1107. 5542. 64152. 19278432.

6. 9. 14. 4. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 9. 14. 5. * NO CONVERGENCE WITHIN 20 ITERATIONS

6. 9. 14. 6. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -184.9

6. 9. 14. 7. * INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE -398.4

6. 9. 15. 1. 4. 0.33 0.44 1.00 522. 1107. 5542. 81873. 22822560.

6. 9. 15. 2. 2. 0.33 0.44 1.00 522. 1107. 5542. 66525. 19752912.

6. 9. 15. 3. 1. 0.33 0.44 1.00 522. 1107. 5542. 63021. 19052096.

6. 9. 15. 4. * NO CONVERGENCE WITHIN 20 ITERATIONS

6.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-113.5
6.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-258.9
6.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-589.7
6.	11.	12.	1.	I	0.33	0.93	1.00	522.	1919.	0.	95637.	26155456.
6.	11.	12.	2.	I	0.33	0.93	1.00	522.	1919.	0.	57227.	18473328.
6.	11.	12.	3.	I	0.33	0.93	1.00	522.	1919.	0.	44450.	15917940.
6.	11.	12.	4.	4.	0.33	0.93	1.00	522.	1919.	4873.	38877.	14923416.
6.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-383.2
6.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2578.9
6.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-14011.9
6.	11.	13.	1.	I	0.33	0.93	1.00	522.	1919.	0.	87833.	24594640.
6.	11.	13.	2.	I	0.33	0.93	1.00	522.	1919.	0.	52498.	17527680.
6.	11.	13.	3.	I	0.33	0.93	1.00	522.	1919.	0.	40749.	15177775.
6.	11.	13.	4.	2.	0.33	0.93	1.00	522.	1919.	4873.	43922.	15932366.
6.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-925.4
6.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-6241.8
6.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-36962.1
6.	11.	14.	1.	I	0.33	0.93	1.00	522.	1919.	0.	81147.	23257328.
6.	11.	14.	2.	I	0.33	0.93	1.00	522.	1919.	0.	48448.	16717673.
6.	11.	14.	3.	I	0.33	0.93	1.00	522.	1919.	0.	37580.	14543940.
6.	11.	14.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-202.9
6.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2042.8
6.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-14608.5
6.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-95772.4
6.	11.	15.	1.	I	0.33	0.93	1.00	522.	1919.	0.	75354.	22098832.
6.	11.	15.	2.	I	0.33	0.93	1.00	522.	1919.	0.	44941.	16016165.
6.	11.	15.	3.	8.	0.33	0.93	1.00	522.	1919.	4873.	34882.	14124485.
6.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-446.4
6.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-4303.0
6.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-33502.8
6.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-245338.4
7.	9.	12.	1.	5.	0.36	0.44	1.00	684.	1067.	5542.	98673.	26902608.
7.	9.	12.	2.	3.	0.36	0.44	1.00	684.	1067.	5542.	78540.	22876048.

7.	9.	12.	3.	2.	0.36	0.44	1.00	684.	1067.	5542.	72620.	21692064.
7.	9.	12.	4.	1.	0.36	0.44	1.00	684.	1067.	5542.	80225.	23212960.
7.	9.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	9.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-89.6
7.	9.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-172.9
7.	9.	13.	1.	5.	0.36	0.44	1.00	684.	1067.	5542.	93606.	25889248.
7.	9.	13.	2.	2.	0.36	0.44	1.00	684.	1067.	5542.	75306.	22229200.
7.	9.	13.	3.	2.	0.36	0.44	1.00	684.	1067.	5542.	70085.	21185040.
7.	9.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	9.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	9.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-125.7
7.	9.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-255.2
7.	9.	14.	1.	5.	0.36	0.44	1.00	684.	1067.	5542.	89354.	25038752.
7.	9.	14.	2.	2.	0.36	0.44	1.00	684.	1067.	5542.	72648.	21697488.
7.	9.	14.	3.	1.	0.36	0.44	1.00	684.	1067.	5542.	68051.	20778224.
7.	9.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	9.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	9.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-175.9
7.	9.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-376.6
7.	9.	15.	1.	4.	0.36	0.44	1.00	684.	1067.	5542.	85756.	24319152.
7.	9.	15.	2.	2.	0.36	0.44	1.00	684.	1067.	5542.	70454.	21258800.
7.	9.	15.	3.	1.	0.36	0.44	1.00	684.	1067.	5542.	66424.	20452832.
7.	9.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
7.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-108.6
7.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-245.9
7.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-556.1
7.	11.	12.	1.	1	0.36	0.93	1.00	684.	1720.	0.	94194.	26586768.
7.	11.	12.	2.	1	0.36	0.93	1.00	684.	1720.	0.	59919.	19731760.
7.	11.	12.	3.	1	0.36	0.93	1.00	684.	1720.	0.	48523.	17452512.
7.	11.	12.	4.	1	0.36	0.93	1.00	684.	1720.	0.	42846.	16317188.
7.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-288.6
7.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2153.4
7.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-12064.6

7.	11.	13.	1.	I	0.36	0.93	1.00	684.	1720.	0.	86510.	25050016.
7.	11.	13.	2.	I	0.36	0.93	1.00	684.	1720.	0.	54991.	18746256.
7.	11.	13.	3.	I	0.36	0.93	1.00	684.	1720.	0.	44516.	16651207.
7.	11.	13.	4.	2.	0.36	0.93	1.00	684.	1720.	4873.	42777.	16423495.
7.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-751.8
7.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5345.1
7.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-32254.3
7.	11.	14.	1.	I	0.36	0.93	1.00	684.	1720.	0.	79927.	23733392.
7.	11.	14.	2.	I	0.36	0.93	1.00	684.	1720.	0.	50771.	17902112.
7.	11.	14.	3.	I	0.36	0.93	1.00	684.	1720.	0.	41085.	15965010.
7.	11.	14.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-147.7
7.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1722.1
7.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-12707.4
7.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-84329.4
7.	11.	15.	1.	I	0.36	0.93	1.00	684.	1720.	0.	74224.	22592864.
7.	11.	15.	2.	I	0.36	0.93	1.00	684.	1720.	0.	47115.	17171056.
7.	11.	15.	3.	I	0.36	0.93	1.00	684.	1720.	0.	38114.	15370898.
7.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-357.1
7.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3707.3
7.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-29451.4
7.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-217394.5
8.	9.	12.	1.	5.	0.37	0.44	1.00	1008.	1032.	5542.	110772.	30762448.
8.	9.	12.	2.	3.	0.37	0.44	1.00	1008.	1032.	5542.	91261.	26860112.
8.	9.	12.	3.	2.	0.37	0.44	1.00	1008.	1032.	5542.	85483.	25704560.
8.	9.	12.	4.	1.	0.37	0.44	1.00	1008.	1032.	5542.	83149.	25237696.
8.	9.	12.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
8.	9.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-88.8
8.	9.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-171.3
8.	9.	13.	1.	5.	0.37	0.44	1.00	1008.	1032.	5542.	104780.	29563936.
8.	9.	13.	2.	2.	0.37	0.44	1.00	1008.	1032.	5542.	87035.	26014960.
8.	9.	13.	3.	2.	0.37	0.44	1.00	1008.	1032.	5542.	81926.	24993264.
8.	9.	13.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
8.	9.	13.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							

8.	9.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-124.6
8.	9.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-252.7
8.	9.	14.	1.	5.	0.37	0.44	1.00	1008.	1032.	5542.	99734.	28554736.
8.	9.	14.	2.	2.	0.37	0.44	1.00	1008.	1032.	5542.	83525.	25312928.
8.	9.	14.	3.	1.	0.37	0.44	1.00	1008.	1032.	5542.	79013.	24410528.
8.	9.	14.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
8.	9.	14.	5.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
8.	9.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-174.4
8.	9.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-372.8
8.	9.	15.	1.	4.	0.37	0.44	1.00	1008.	1032.	5542.	95448.	27697584.
8.	9.	15.	2.	2.	0.37	0.44	1.00	1008.	1032.	5542.	80591.	24726272.
8.	9.	15.	3.	1.	0.37	0.44	1.00	1008.	1032.	5542.	76619.	23931856.
8.	9.	15.	4.	*	NO CONVERGENCE WITHIN 20 ITERATIONS							
8.	9.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-107.7
8.	9.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-243.6
8.	9.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-550.2
8.	11.	12.	1.	I	0.37	0.93	1.00	1008.	1455.	0.	97462.	28680464.
8.	11.	12.	2.	I	0.37	0.93	1.00	1008.	1455.	0.	68497.	22887472.
8.	11.	12.	3.	I	0.37	0.93	1.00	1008.	1455.	0.	58868.	20961504.
8.	11.	12.	4.	I	0.37	0.93	1.00	1008.	1455.	0.	54071.	20002272.
8.	11.	12.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-271.9
8.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2078.5
8.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-11722.6
8.	11.	13.	1.	I	0.37	0.93	1.00	1008.	1455.	0.	89589.	27105840.
8.	11.	13.	2.	I	0.37	0.93	1.00	1008.	1455.	0.	62955.	21779040.
8.	11.	13.	3.	I	0.37	0.93	1.00	1008.	1455.	0.	54104.	20008864.
8.	11.	13.	4.	3.	0.37	0.93	1.00	1008.	1455.	4873.	52496.	19807152.
8.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-721.2
8.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-5187.3
8.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-31429.0
8.	11.	14.	1.	I	0.37	0.93	1.00	1008.	1455.	0.	82843.	25756672.
8.	11.	14.	2.	I	0.37	0.93	1.00	1008.	1455.	0.	58207.	20829456.
8.	11.	14.	3.	I	0.37	0.93	1.00	1008.	1455.	0.	50024.	19192848.

8.	11.	14.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-137.9
8.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1665.5
8.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-12373.4
8.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-82325.9
8.	11.	15.	1.	I	0.37	0.93	1.00	1008.	1455.	0.	76999.	24587872.
8.	11.	15.	2.	I	0.37	0.93	1.00	1008.	1455.	0.	54095.	20006944.
8.	11.	15.	3.	I	0.37	0.93	1.00	1008.	1455.	0.	46491.	18486176.
8.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-341.3
8.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3602.5
8.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-28740.8
8.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-212511.5
9.	11.	12.	1.	I	0.44	0.93	1.00	1402.	1332.	0.	108325.	32652928.
9.	11.	12.	2.	I	0.44	0.93	1.00	1402.	1332.	0.	82054.	27398704.
9.	11.	12.	3.	I	0.44	0.93	1.00	1402.	1332.	0.	73329.	25653840.
9.	11.	12.	4.	I	0.44	0.93	1.00	1402.	1332.	0.	68992.	24786304.
9.	11.	12.	5.	2.	0.44	0.93	1.00	1402.	1332.	4873.	68998.	24907680.
9.	11.	12.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-1190.6
9.	11.	12.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-7693.9
9.	11.	13.	1.	I	0.44	0.93	1.00	1402.	1332.	0.	99587.	30905328.
9.	11.	13.	2.	I	0.44	0.93	1.00	1402.	1332.	0.	75449.	26077840.
9.	11.	13.	3.	I	0.44	0.93	1.00	1402.	1332.	0.	67439.	24475728.
9.	11.	13.	4.	I	0.44	0.93	1.00	1402.	1332.	0.	63460.	23679952.
9.	11.	13.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-356.9
9.	11.	13.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-3323.6
9.	11.	13.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-21734.1
9.	11.	14.	1.	I	0.44	0.93	1.00	1402.	1332.	0.	92100.	29408048.
9.	11.	14.	2.	I	0.44	0.93	1.00	1402.	1332.	0.	69792.	24946320.
9.	11.	14.	3.	I	0.44	0.93	1.00	1402.	1332.	0.	62393.	23466640.
9.	11.	14.	4.	3.	0.44	0.93	1.00	1402.	1332.	4873.	59829.	23073856.
9.	11.	14.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-995.0
9.	11.	14.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-8437.5
9.	11.	14.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-58866.6
9.	11.	15.	1.	I	0.44	0.93	1.00	1402.	1332.	0.	85615.	28111008.

9.	11.	15.	2.	I	0.44	0.93	1.00	1402.	1332.	0.	64891.	23966272.
9.	11.	15.	3.	I	0.44	0.93	1.00	1402.	1332.	0.	58024.	22592752.
9.	11.	15.	4.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-153.2
9.	11.	15.	5.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-2361.0
9.	11.	15.	6.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-20386.4
9.	11.	15.	7.	*	INITIAL X VALUE WILL CAUSE EXPONENT OVERFLOW. NEED NEW STARTING VALUE							-155484.1
10.	11.	12.	1.	I	0.86	0.93	1.00	4073.	1062.	0.	205635.	62914896.
10.	11.	12.	2.	I	0.86	0.93	1.00	4073.	1062.	0.	185811.	58950096.
10.	11.	12.	3.	I	0.86	0.93	1.00	4073.	1062.	0.	179297.	57647472.
10.	11.	12.	4.	I	0.86	0.93	1.00	4073.	1062.	0.	176111.	57010176.
10.	11.	12.	5.	I	0.86	0.93	1.00	4073.	1062.	0.	174253.	56638592.
10.	11.	12.	6.	I	0.86	0.93	1.00	4073.	1062.	0.	173058.	56399600.
10.	11.	12.	7.	I	0.86	0.93	1.00	4073.	1062.	0.	172240.	56235952.
10.	11.	13.	1.	I	0.86	0.93	1.00	4073.	1062.	0.	189244.	59636848.
10.	11.	13.	2.	I	0.86	0.93	1.00	4073.	1062.	0.	171121.	56012160.
10.	11.	13.	3.	I	0.86	0.93	1.00	4073.	1062.	0.	165182.	54824288.
10.	11.	13.	4.	I	0.86	0.93	1.00	4073.	1062.	0.	162286.	54245280.
10.	11.	13.	5.	I	0.86	0.93	1.00	4073.	1062.	0.	160607.	53909376.
10.	11.	13.	6.	I	0.86	0.93	1.00	4073.	1062.	0.	159533.	53694592.
10.	11.	13.	7.	I	0.86	0.93	1.00	4073.	1062.	0.	158803.	53548592.
10.	11.	14.	1.	I	0.86	0.93	1.00	4073.	1062.	0.	175205.	56828928.
10.	11.	14.	2.	I	0.86	0.93	1.00	4073.	1062.	0.	158539.	53495728.
10.	11.	14.	3.	I	0.86	0.93	1.00	4073.	1062.	0.	153092.	52406352.
10.	11.	14.	4.	I	0.86	0.93	1.00	4073.	1062.	0.	150447.	51877456.
10.	11.	14.	5.	I	0.86	0.93	1.00	4073.	1062.	0.	148921.	51572240.
10.	11.	14.	6.	I	0.86	0.93	1.00	4073.	1062.	0.	147952.	51378352.
10.	11.	14.	7.	I	0.86	0.93	1.00	4073.	1062.	0.	147298.	51247568.
10.	11.	15.	1.	I	0.86	0.93	1.00	4073.	1062.	0.	163046.	54397120.
10.	11.	15.	2.	I	0.86	0.93	1.00	4073.	1062.	0.	147642.	51316432.
10.	11.	15.	3.	I	0.86	0.93	1.00	4073.	1062.	0.	142623.	50312512.
10.	11.	15.	4.	I	0.86	0.93	1.00	4073.	1062.	0.	140196.	49827200.
10.	11.	15.	5.	I	0.86	0.93	1.00	4073.	1062.	0.	138804.	49548688.
10.	11.	15.	6.	I	0.86	0.93	1.00	4073.	1062.	0.	137925.	49373008.

10. 11. 15. 7. I 0.86 0.93 1.00 4073. 1062. 0. 137337. 49255472.

ASP JOB NO. = 0762 DATE = 76.036

```
//NWQDMISP JOB (134733WD,C,U,N),'LOR W D DUDZIK',RD=R LOR


        ELAPSED TIME ON MAIN = M91      = 000.52, START TIME = 14.15.11

        DDNAME = SYSMSG                    PRINTED ON RM010PR1, LINES = 000088
        DDNAME = ASPOA001                  PRINTED ON RM010PR1, LINES = 001516
        LINES OUTPUT FOR THIS JOB = 001604

      CARDS FROM MAIN FOR THIS JOB = NONE
```

TABLE 6

EXAMPLE RESULTS 4

LIST OF INPUT DATA

```
      7.00       12.00       15.50
      2.00        2.00        2.00
     10.00      500.00     1000.00
      0.0       10.00       10.00
      0.01       0.10        0.75
     20.00        2.00        1.00
      2.00       10.00        1.00
     12.00       12.00        1.00
     10.00       20.00        1.00
      1.00        7.00        1.00
  50000.00       10.00      500.00
     12.00
      0.70
      0.15
     20.00
      7.00
     20.00
      1.000000     1.000000     1.500000     1.500000
      1.500000     1.500000     1.500000     1.500000
      2.000000     2.000000     2.000000     2.000000
      1.000000
  20000.000000 20000.000000 28000.000000 40000.000000
  40000.000000 89400.000000 40000.000000 80000.000000
 100000.000000 600000.000000 100000.000000 100000.000000
  20000.000000
      0.001020     0.000660     0.000550     0.001060
      0.000500     0.000280     0.000210     0.000450
      0.000120     0.000120     0.000010     0.000130
      0.001000
      0.001000     0.000900     0.001180     0.001260
      0.000700     0.001540     0.000670     0.000120
      0.001470     0.008570     0.001390     0.001350
      0.020150
      0.300000     0.300000     0.300000     0.300000
      0.500000     0.300000     0.300000     0.300000
      0.300000     1.000000     1.000000     2.000000
      0.200000
```

INPUT DATA DESCRIPTION

PAY RATE($/HR) AT TESTER	7.00	12.00	15.50
NO. MEN TO OPERATE TESTER	2.00	2.00	2.00
COST OF SHIPPING TO TESTER	10.00	500.00	1000.00
COST OF PACKING TO SHIP TO TESTER	0.0	10.00	10.00
TURNAROUND TIME(YRS) TO TEST ITEM	0.01	0.10	0.75
NUMBER OF TESTERS	20.00	2.00	1.00
NO. TESTER1 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	2.	10.	1.
NO. TESTER2 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	12.	12.	1.
NO. CYCLES BETWEEN FIRST ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)	10.	20.	1.

NO. X(CYCLES BETWEEN FIRST ECHELON TESTS)	1.	7.	1.
CYCLES BETWEEN SECOND ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)			
ITEM COST,ITEM LIFECYCLE,NO. OF ITEMS	50000.	10.	500.
NO. ITEM FUNCTIONS TESTED	12.		
FRACTION OF ITEMS IN USE NOT DEFECTIVE	0.70		
REPAIR MATERIAL RATIO	0.15		
NO. USE CYCLES	20.		
INITIAL VALVE FOR NEWTON-RAPHSON METHOD	7.		
MAXIMUM NO. ITERATIONS FOR N-R METHOD	20.		

TIME REQD TO REPAIR EQUIP. WHICH TESTS ITH FUN	1.000000	1.000000	1.500000	1.500000
	1.500000	1.500000	1.500000	1.500000
	2.000000	2.000000	2.000000	2.000000
	1.000000			
COST OF EQUIPMENT TO TEST ITH FUNCTION	20000.000000	20000.000000	28000.000000	40000.000000
	40000.000000	89400.000000	40000.000000	80000.000000
	100000.000000	600000.000000	100000.000000	100000.000000
	20000.000000			
FAILURE RATE OF EQUIP. TO TEST ITH FUNCTION	0.001020	0.000660	0.000550	0.001060
	0.000500	0.000280	0.000210	0.000450
	0.000120	0.000120	0.000010	0.000130
	0.001000			
FAILURE RATE OF ITH FUNCTION OF ITEM	0.001000	0.000900	0.001180	0.001260
	0.000700	0.001540	0.000670	0.000120
	0.001470	0.008570	0.001390	0.001350
	0.020150			
TIME REQD TO TEST ITH FUNCTION	0.300000	0.300000	0.300000	0.300000
	0.500000	0.300000	0.300000	0.300000
	0.300000	1.000000	1.000000	2.000000
	0.200000			

TEST COST SUMMARY

FUNCTIONS M1	FUNCTIONS M2	CYCLES N1	CYCLES N2	CYCLES N3	DEFECTIVE ITEMS FAILING TEST1	TEST2	TEST3	TEST1 COST	TEST2 COST	TEST3 COST	COMPLETE TEST COST	LIFE CYCLE COST
2.	12.	10.	4.	0.	0.09	1.00	0.0	91.	6511.	0.	77491.	19173008.
2.	12.	11.	4.	0.	0.09	1.00	0.0	91.	6511.	0.	77231.	19120912.
2.	12.	12.	4.	0.	0.09	1.00	0.0	91.	6511.	0.	77040.	19082704.
2.	12.	13.	3.	0.	0.09	1.00	0.0	91.	6511.	0.	76901.	19055072.
2.	12.	14.	3.	0.	0.09	1.00	0.0	91.	6511.	0.	76806.	19036032.
2.	12.	15.	3.	0.	0.09	1.00	0.0	91.	6511.	0.	76744.	19023648.

2.	12.	16.	3.	0.	0.09	1.00	0.0	91.	6511.	0.	76710.	19016880.
2.	12.	17.	2.	0.	0.09	1.00	0.0	91.	6511.	0.	76700.	19014704.
2.	12.	18.	2.	0.	0.09	1.00	0.0	91.	6511.	0.	76708.	19016368.
2.	12.	19.	2.	0.	0.09	1.00	0.0	91.	6511.	0.	76733.	19021360.
2.	12.	20.	2.	0.	0.09	1.00	0.0	91.	6511.	0.	76772.	19029104.
3.	12.	10.	5.	0.	0.15	1.00	0.0	122.	5523.	0.	62362.	16651135.
3.	12.	11.	4.	0.	0.15	1.00	0.0	122.	5523.	0.	62010.	16580781.
3.	12.	12.	4.	0.	0.15	1.00	0.0	122.	5523.	0.	61753.	16529357.
3.	12.	13.	3.	0.	0.15	1.00	0.0	122.	5523.	0.	61569.	16492510.
3.	12.	14.	3.	0.	0.15	1.00	0.0	122.	5523.	0.	61442.	16467156.
3.	12.	15.	3.	0.	0.15	1.00	0.0	122.	5523.	0.	61362.	16451151.
3.	12.	16.	3.	0.	0.15	1.00	0.0	122.	5523.	0.	61320.	16442790.
3.	12.	17.	3.	0.	0.15	1.00	0.0	122.	5523.	0.	61310.	16440732.
3.	12.	18.	2.	0.	0.15	1.00	0.0	122.	5523.	0.	61326.	16444082.
3.	12.	19.	2.	0.	0.15	1.00	0.0	122.	5523.	0.	61366.	16451963.
3.	12.	20.	2.	0.	0.15	1.00	0.0	122.	5523.	0.	61425.	16463838.
4.	12.	10.	5.	0.	0.22	1.00	0.0	195.	4070.	0.	46731.	14244926.
4.	12.	11.	4.	0.	0.22	1.00	0.0	195.	4070.	0.	46052.	14109268.
4.	12.	12.	4.	0.	0.22	1.00	0.0	195.	4070.	0.	45524.	14003655.
4.	12.	13.	4.	0.	0.22	1.00	0.0	195.	4070.	0.	45112.	13921245.
4.	12.	14.	3.	0.	0.22	1.00	0.0	195.	4070.	0.	44792.	13857205.
4.	12.	15.	3.	0.	0.22	1.00	0.0	195.	4070.	0.	44546.	13807913.
4.	12.	16.	3.	0.	0.22	1.00	0.0	195.	4070.	0.	44360.	13770775.
4.	12.	17.	3.	0.	0.22	1.00	0.0	195.	4070.	0.	44224.	13743688.
4.	12.	18.	1.	0.	0.22	1.00	0.0	195.	4070.	0.	109989.	26896512.
4.	12.	19.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44075.	13713743.
4.	12.	20.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44049.	13708678.
5.	12.	10.	5.	0.	0.25	1.00	0.0	316.	3262.	0.	43444.	14307522.
5.	12.	11.	5.	0.	0.25	1.00	0.0	316.	3262.	0.	42198.	14058420.
5.	12.	12.	4.	0.	0.25	1.00	0.0	316.	3262.	0.	41195.	13857705.
5.	12.	13.	4.	0.	0.25	1.00	0.0	316.	3262.	0.	40378.	13694342.
5.	12.	14.	3.	0.	0.25	1.00	0.0	316.	3262.	0.	39708.	13560456.
5.	12.	15.	3.	0.	0.25	1.00	0.0	316.	3262.	0.	39157.	13450262.

5.	12.	16.	3.	0.	0.25	1.00	0.0	316.	3262.	0.	38703.	13359436.
5.	12.	17.	3.	0.	0.25	1.00	0.0	316.	3262.	0.	38329.	13284652.
5.	12.	18.	3.	0.	0.25	1.00	0.0	316.	3262.	0.	38023.	13223375.
5.	12.	19.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37774.	13173538.
5.	12.	20.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37574.	13133563.
6.	12.	10.	6.	0.	0.33	1.00	0.0	522.	2756.	0.	45699.	16367898.
6.	12.	11.	5.	0.	0.33	1.00	0.0	522.	2756.	0.	43532.	15934357.
6.	12.	12.	5.	0.	0.33	1.00	0.0	522.	2756.	0.	41763.	15580532.
6.	12.	13.	4.	0.	0.33	1.00	0.0	522.	2756.	0.	40301.	15288237.
6.	12.	14.	4.	0.	0.33	1.00	0.0	522.	2756.	0.	39082.	15044428.
6.	12.	15.	4.	0.	0.33	1.00	0.0	522.	2756.	0.	38058.	14839586.
6.	12.	16.	3.	0.	0.33	1.00	0.0	522.	2756.	0.	37193.	14666591.
6.	12.	17.	3.	0.	0.33	1.00	0.0	522.	2756.	0.	36460.	14519957.
6.	12.	18.	3.	0.	0.33	1.00	0.0	522.	2756.	0.	35837.	14395475.
6.	12.	19.	3.	0.	0.33	1.00	0.0	522.	2756.	0.	35309.	14289778.
6.	12.	20.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	34861.	14200231.
7.	12.	10.	6.	0.	0.36	1.00	0.0	684.	2443.	0.	50151.	17978192.
7.	12.	11.	5.	0.	0.36	1.00	0.0	684.	2443.	0.	47236.	17395280.
7.	12.	12.	5.	0.	0.36	1.00	0.0	684.	2443.	0.	44844.	16916752.
7.	12.	13.	4.	0.	0.36	1.00	0.0	684.	2443.	0.	42854.	16518705.
7.	12.	14.	4.	0.	0.36	1.00	0.0	684.	2443.	0.	41180.	16184075.
7.	12.	15.	4.	0.	0.36	1.00	0.0	684.	2443.	0.	39762.	15900361.
7.	12.	16.	3.	0.	0.36	1.00	0.0	684.	2443.	0.	38551.	15658193.
7.	12.	17.	3.	0.	0.36	1.00	0.0	684.	2443.	0.	37512.	15450428.
7.	12.	18.	3.	0.	0.36	1.00	0.0	684.	2443.	0.	36618.	15271502.
7.	12.	19.	3.	0.	0.36	1.00	0.0	684.	2443.	0.	35845.	15117016.
7.	12.	20.	1.	0.	0.36	1.00	0.0	684.	2443.	0.	69933.	21934656.
8.	12.	10.	6.	0.	0.37	1.00	0.0	1008.	1975.	0.	63069.	22001776.
8.	12.	11.	5.	0.	0.37	1.00	0.0	1008.	1975.	0.	58648.	21117600.
8.	12.	12.	5.	0.	0.37	1.00	0.0	1008.	1975.	0.	54994.	20386736.
8.	12.	13.	4.	0.	0.37	1.00	0.0	1008.	1975.	0.	51930.	19773920.
8.	12.	14.	4.	0.	0.37	1.00	0.0	1008.	1975.	0.	49330.	19254048.
8.	12.	15.	4.	0.	0.37	1.00	0.0	1008.	1975.	0.	47103.	18808656.

8.	12.	15.	3.	0.	0.37	1.00	0.0	1008.	1975.	0.	45180.	18423952.	
8.	12.	17.	3.	0.	0.37	1.00	0.0	1008.	1975.	0.	43507.	18089360.	
8.	12.	18.	3.	0.	0.37	1.00	0.0	1008.	1975.	0.	42043.	17796672.	
8.	12.	19.	3.	0.	0.37	1.00	0.0	1008.	1975.	0.	40757.	17539408.	
8.	12.	20.	1.	0.	0.37	1.00	0.0	1008.	1975.	0.	67806.	22949088.	8,12
9.	12.	10.	7.	0.	0.44	1.00	0.0	1402.	1762.	0.	79141.	27016112.	
9.	12.	11.	6.	0.	0.44	1.00	0.0	1402.	1762.	0.	72928.	25773664.	
9.	12.	12.	5.	0.	0.44	1.00	0.0	1402.	1762.	0.	67782.	24744400.	
9.	12.	13.	5.	0.	0.44	1.00	0.0	1402.	1762.	0.	63457.	23879376.	
9.	12.	14.	5.	0.	0.44	1.00	0.0	1402.	1762.	0.	59778.	23143552.	
9.	12.	15.	4.	0.	0.44	1.00	0.0	1402.	1762.	0.	56616.	22511280.	
9.	12.	16.	4.	0.	0.44	1.00	0.0	1402.	1762.	0.	53877.	21963360.	
9.	12.	17.	4.	0.	0.44	1.00	0.0	1402.	1762.	0.	51485.	21485088.	
9.	12.	18.	3.	0.	0.44	1.00	0.0	1402.	1762.	0.	49385.	21065056.	
9.	12.	19.	3.	0.	0.44	1.00	0.0	1402.	1762.	0.	47531.	20694240.	
9.	12.	20.	3.	0.	0.44	1.00	0.0	1402.	1762.	0.	45887.	20365472.	9,12
10.	12.	10.	I	0.	0.86	1.00	0.0	4073.	0.	0.	203669.	62281792.	
10.	12.	11.	I	0.	0.86	1.00	0.0	4073.	0.	0.	185154.	58578720.	
10.	12.	12.	I	0.	0.86	1.00	0.0	4073.	0.	0.	169724.	55492816.	
10.	12.	13.	I	0.	0.86	1.00	0.0	4073.	0.	0.	156668.	52881680.	
10.	12.	14.	I	0.	0.86	1.00	0.0	4073.	0.	0.	145478.	50643552.	
10.	12.	15.	I	0.	0.86	1.00	0.0	4073.	0.	0.	135779.	48703856.	
10.	12.	16.	I	0.	0.86	1.00	0.0	4073.	0.	0.	127293.	47006608.	
10.	12.	17.	I	0.	0.86	1.00	0.0	4073.	0.	0.	119805.	45509040.	
10.	12.	18.	I	0.	0.86	1.00	0.0	4073.	0.	0.	113149.	44177856.	
10.	12.	19.	I	0.	0.86	1.00	0.0	4073.	0.	0.	107194.	42986816.	
10.	12.	20.	I	0.	0.86	1.00	0.0	4073.	0.	0.	101835.	41914896.	

TABLE 7

EXAMPLE RESULTS 5

LIST OF INPUT DATA

```
      7.00        12.00        15.50
      2.00         2.00         2.00
     10.00       500.00      1000.00
      0.0         10.00        10.00
      0.01         0.10         0.75
     20.00         2.00         1.00
      4.00        11.00         1.00
     12.00        12.00         1.00
     20.00        30.00         1.00
      1.00         7.00         1.00
  50000.00        10.00       500.00
     12.00
      0.70
      0.15
     20.00
      4.00
     20.00
        1.000000         1.000000         1.500000         1.500000
        1.500000         1.500000         1.500000         1.500000
        2.000000         2.000000         2.000000         2.000000
        1.000000
    20000.000000     20000.000000     28000.000000     40000.000000
    40000.000000     89400.000000     40000.000000     80000.000000
   100000.000000    600000.000000    100000.000000    100000.000000
    20000.000000
        0.001020         0.000660         0.000550         0.001060
        0.000500         0.000280         0.000210         0.000450
        0.000120         0.000120         0.000010         0.000130
        0.001000
        0.001000         0.000900         0.001180         0.001260
        0.000700         0.001540         0.000670         0.000120
        0.001470         0.008570         0.001390         0.001350
        0.020150
        0.300000         0.300000         0.300000         0.300000
        0.500000         0.300000         0.300000         0.300000
        0.300000         1.000000         1.000000         2.000000
        0.200000
```

INPUT DATA DESCRIPTION

PAY RATE($/HR) AT TESTER	7.00	12.00	15.50
NO. MEN TO OPERATE TESTER	2.00	2.00	2.00
COST OF SHIPPING TO TESTER	10.00	500.00	1000.00
COST OF PACKING TO SHIP TO TESTER	0.0	10.00	10.00
TURNAROUND TIME(YRS) TO TEST ITEM	0.01	0.10	0.75
NUMBER OF TESTERS	20.00	2.00	1.00
NO. TESTER1 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	4.	11.	1.
NO. TESTER2 FUNCTIONS(INITIAL VALUE FINAL VALUE,INCREMENT)	12.	12.	1.
NO. CYCLES BETWEEN FIRST ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)	20.	30.	1.

NO. X(CYCLES BETWEEN FIRST ECHELON TESTS)	1.	7.	1.
CYCLES BETWEEN SECOND ECHELON TESTS (INITIAL VALUE,FINAL VALUE,INCREMENT)			
ITEM COST,ITEM LIFECYCLE,NO. OF ITEMS	50000.	10.	500.

NO. ITEM FUNCTIONS TESTED	12.
FRACTION OF ITEMS IN USE NOT DEFECTIVE	0.70
REPAIR MATERIAL RATIO	0.15
NO. USE CYCLES	20.
INITIAL VALVE FOR NEWTON-RAPHSON METHOD	4.
MAXIMUM NO. ITERATIONS FOR N-R METHOD	20.

TIME REQD TO REPAIR EQUIP. WHICH TESTS ITH FUN	1.000000	1.000000	1.500000	1.500000
	1.500000	1.500000	1.500000	1.500000
	2.000000	2.000000	2.000000	2.000000
	1.000000			
COST OF EQUIPMENT TO TEST ITH FUNCTION	20000.000000	20000.000000	28000.000000	40000.000000
	40000.000000	89400.000000	40000.000000	80000.000000
	100000.000000	600000.000000	100000.000000	100000.000000
	20000.000000			
FAILURE RATE OF EQUIP. TO TEST ITH FUNCTION	0.001020	0.000660	0.000550	0.001060
	0.000500	0.000280	0.000210	0.000450
	0.000120	0.000120	0.000010	0.000130
	0.001000			
FAILURE RATE OF ITH FUNCTION OF ITEM	0.001000	0.000900	0.001180	0.001260
	0.000700	0.001540	0.000670	0.000120
	0.001470	0.008570	0.001390	0.001350
	0.020150			
TIME REQD TO TEST ITH FUNCTION	0.300000	0.300000	0.300000	0.300000
	0.500000	0.300000	0.300000	0.300000
	0.300000	1.000000	1.000000	2.000000
	0.200000			

TEST COST SUMMARY

FUNCTIONS M1	FUNCTIONS M2	CYCLES N1	CYCLES N2	CYCLES N3	DEFECTIVE ITEMS FAILING TEST1	TEST2	TEST3	TEST1 COST	TEST2 COST	TEST3 COST	COMPLETE TEST COST	LIFE CYCLE COST
4.	12.	20.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44049.	13708670.
4.	12.	21.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44051.	13709038.
4.	12.	22.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44077.	13714203.
4.	12.	23.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44124.	13723600.
4.	12.	24.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44190.	13736827.
4.	12.	25.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44273.	13753495.

4.	12.	26.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44372.	13773238.	
4.	12.	27.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44486.	13795900.	
4.	12.	28.	2.	0.	0.22	1.00	0.0	195.	4070.	0.	44612.	13821148.	
4.	12.	29.	1.	0.	0.22	1.00	0.0	195.	4070.	0.	44750.	13848833.	
4.	12.	30.	1.	0.	0.22	1.00	0.0	195.	4070.	0.	62809.	17460624.	
5.	12.	20.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37574.	13133566.	
5.	12.	21.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37417.	13102103.	
5.	12.	22.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37297.	13078132.	
5.	12.	23.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37210.	13060743.	
5.	12.	24.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37152.	13049221.	
5.	12.	25.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37121.	13042957.	
5.	12.	26.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37113.	13041418.	←
5.	12.	27.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37127.	13044233.	
5.	12.	28.	2.	0.	0.25	1.00	0.0	316.	3262.	0.	37161.	13050958.	
5.	12.	29.	1.	0.	0.25	1.00	0.0	316.	3262.	0.	37213.	13061307.	
5.	12.	30.	1.	0.	0.25	1.00	0.0	316.	3262.	0.	52010.	16020745.	
6.	12.	20.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	34861.	14200228.	
6.	12.	21.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	34483.	14124653.	
6.	12.	22.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	34167.	14061312.	
6.	12.	23.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33904.	14008756.	
6.	12.	24.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33689.	13965787.	
6.	12.	25.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33517.	13931425.	
6.	12.	26.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33384.	13904803.	
6.	12.	27.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33286.	13885243.	
6.	12.	28.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33221.	13872120.	
6.	12.	29.	2.	0.	0.33	1.00	0.0	522.	2756.	0.	33185.	13864938.	} almost identical
6.	12.	30.	1.	0.	0.33	1.00	0.0	522.	2756.	0.	33176.	13863246.	}
7.	12.	20.	3.	0.	0.36	1.00	0.0	684.	2443.	0.	35178.	14983503.	
7.	12.	21.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	34601.	14868118.	
7.	12.	22.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	34103.	14768565.	
7.	12.	23.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	33675.	14682937.	
7.	12.	24.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	33308.	14609687.	
7.	12.	25.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	32997.	14547493.	

7.	12.	26.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	32736.	14495257.
7.	12.	27.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	32520.	14452065.
7.	12.	28.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	32345.	14417081.
7.	12.	29.	2.	0.	0.36	1.00	0.0	684.	2443.	0.	32208.	14389673.
7.	12.	30.	1.	0.	0.36	1.00	0.0	684.	2443.	0.	32106.	14369253.
8.	12.	20.	3.	0.	0.37	1.00	0.0	1008.	1975.	0.	39622.	17312432.
8.	12.	21.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	38618.	17111520.
8.	12.	22.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	37726.	16933296.
8.	12.	23.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	36935.	16774917.
8.	12.	24.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	36230.	16634056.
8.	12.	25.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	35604.	16508766.
8.	12.	26.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	35047.	16397376.
8.	12.	27.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	34553.	16298513.
8.	12.	28.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	34115.	16210975.
8.	12.	29.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	33729.	16133756.
8.	12.	30.	2.	0.	0.37	1.00	0.0	1008.	1975.	0.	33390.	16065957.
9.	12.	20.	3.	0.	0.44	1.00	0.0	1402.	1762.	0.	45887.	20365472.
9.	12.	21.	3.	0.	0.44	1.00	0.0	1402.	1762.	0.	44425.	20072928.
9.	12.	22.	3.	0.	0.44	1.00	0.0	1402.	1762.	0.	43119.	19811872.
9.	12.	23.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	41952.	19578384.
9.	12.	24.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	40906.	19369248.
9.	12.	25.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	39969.	19181744.
9.	12.	26.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	39128.	19013568.
9.	12.	27.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	38374.	18862816.
9.	12.	28.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	37699.	18727840.
9.	12.	29.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	37096.	18607232.
9.	12.	30.	2.	0.	0.44	1.00	0.0	1402.	1762.	0.	36559.	18499808.
10.	12.	20.	1	0.	0.86	1.00	0.0	4073.	0.	0.	101835.	41914896.
10.	12.	21.	1	0.	0.86	1.00	0.0	4073.	0.	0.	96985.	40945024.
10.	12.	22.	1	0.	0.86	1.00	0.0	4073.	0.	0.	92577.	40063344.
10.	12.	23.	1	0.	0.86	1.00	0.0	4073.	0.	0.	88552.	39258336.
10.	12.	24.	1	0.	0.86	1.00	0.0	4073.	0.	0.	84862.	38520400.
10.	12.	25.	1	0.	0.86	1.00	0.0	4073.	0.	0.	81468.	37841504.

10.	12.	26.	I	0.	0.86	1.00	0.0	4073.	0.	0.	78334.	37214832.
10.	12.	27.	10.	0.	0.86	1.00	0.0	4073.	1208.	0.	75519.	37091824.
10.	12.	28.	7.	0.	0.86	1.00	0.0	4073.	1208.	0.	73003.	36588512.
10.	12.	29.	6.	0.	0.86	1.00	0.0	4073.	1208.	0.	70716.	36131248.
10.	12.	30.	5.	0.	0.86	1.00	0.0	4073.	1208.	0.	68643.	35716560.
11.	12.	20.	I	0.	0.93	1.00	0.0	5518.	0.	0.	137949.	51137792.
11.	12.	21.	I	0.	0.93	1.00	0.0	5518.	0.	0.	131380.	49823968.
11.	12.	22.	I	0.	0.93	1.00	0.0	5518.	0.	0.	125408.	48629616.
11.	12.	23.	I	0.	0.93	1.00	0.0	5518.	0.	0.	119956.	47539088.
11.	12.	24.	I	0.	0.93	1.00	0.0	5518.	0.	0.	114957.	46539472.
11.	12.	25.	I	0.	0.93	1.00	0.0	5518.	0.	0.	110359.	45619808.
11.	12.	26.	I	0.	0.93	1.00	0.0	5518.	0.	0.	106115.	44770896.
11.	12.	27.	I	0.	0.93	1.00	0.0	5518.	0.	0.	102184.	43984864.
11.	12.	28.	I	0.	0.93	1.00	0.0	5518.	0.	0.	98535.	43254976.
11.	12.	29.	I	0.	0.93	1.00	0.0	5518.	0.	0.	95137.	42575440.
11.	12.	30.	I	0.	0.93	1.00	0.0	5518.	0.	0.	91966.	41941184.