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SIP MATRIX INVERSION

By

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SUMMARY

A matrix inversion scheme, SIP, is introduced. It is a combination of inversion by submatrices and of iterative inversion. Several variants of the scheme are given, together with examples of success and of failure. The report also contains a survey of significant analytical inversion techniques.

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INTRODUCTION

The purpose of this report is to introduce a new technique for matrix inversion, called the Submatrix Iterative Process (SIP). This technique evolved from investigations in the theory of structures, but its uses are of course not limited to that field. Defining the need for a new process of inversion was the realization that all practical methods of inversion tend to break large matrices into smaller ones, with the inevitable side result that the large blocks of zero entries often present in these matrices lose much of their smoothing effect.

In contrast, SIP inversion makes full use of these zeros. Essentially, SIP consists of a combination of two methods: inversion of a matrix in terms of its sub-matrices, and the subsequent use of iteration on the entire matrix. The technique is based on two foundations: Theoretically, its successful applications depends on the spectral theory of operators in finite dimensional spaces, while from a practical point of view it conforms to the fact that large order matrices (at least in structural mechanics) tend to be the band-type.

In order to be self-contained to a certain extent, this report contains a section on classical analytical methods of matrix inversion, followed by a discussion of numerical inversion schemes. Further, recognizing that while SIP can handle any matrix, it is most efficient on large order band matrices, we give a discussion of the inversion of some special types of matrices. This is followed by an example, attacked in several different ways; and a discussion of the connection between redundant structures and certain types of matrices. The next section is devoted to a full description of the Sub-matrix Iterative Process, after which, in the appendix, a simplified SIP 3 program is reproduced, together with various examples of actual inversions performed by the computer. The program itself was written and applied by R. Mc Craney of the Wyle Laboratories Computer Staff, on a CDC 3200 computer. The report concludes with a brief bibliography.

1.0 ANALYTICAL INVERSION OF MATRICES

1) Inversion by Elementary Row and Column Operations

The layout for this elementary technique is given below. We are to invert the matrix

$$A = \begin{vmatrix} a_{11} & a_{12} & a_{13} & \cdots & a_{1n} \\ a_{21} & a_{22} & a_{23} & \cdots & a_{2n} \\ \vdots & \vdots & \vdots & & \vdots \\ a_{n1} & a_{n2} & a_{n3} & \cdots & a_{nn} \end{vmatrix}$$

Form the $2n \times 2n$ matrix

$$K = \begin{vmatrix} A & I \\ I & 0 \end{vmatrix},$$

where I is the n'th order unit matrix and 0 the n'th order null matrix. Then, using the elementary row and column operations, transform K into the form

$$K' = \begin{vmatrix} I & Q \\ P & 0 \end{vmatrix}$$

It is then easily shown that the inverse A^{-1} of A is given by

$$A^{-1} = PQ$$

2) Inversion by Partitioning

We often have matrices of large order, such that they are built of submatrices with known inverses. In many of these situations the inversion of the large order matrix can be reduced to that of a 2×2 or a 3×3 matrix. For illustration, we shall use a 2×2.

Thus, let A be an $n \times n$ matrix, partitioned in the following manner:

$$A = \begin{vmatrix} A_{11} & A_{12} \\ A_{21} & A_{22} \end{vmatrix},$$

where the orders of the submatrices are the following:

$$
\begin{array}{lll}
A_{11} & : & k \times k \qquad , \qquad k \geq 1 \\
A_{12} & : & k \times (n-k) \\
A_{21} & : & (n-k) \times k \\
A_{22} & : & (n-k) \times (n-k)
\end{array}
$$

A special case of this would be when $k = n/2$, in which case each one of the submatrices in the partition would be a square one.

Let us assume that A^{-1} is given by a partitioned matrix of the same form:

$$
A^{-1} = \begin{vmatrix} D_{11} & D_{12} \\ D_{21} & D_{22} \end{vmatrix}
$$

The orders of the D's are assumed to be the same as those of the corresponding A's with identical subscript.

With the assumption that the following indicated inverses exist, simple calculations show that

$$
\begin{aligned}
D_{11} &= (A_{11} - A_{12} A_{22}^{-1} A_{21})^{-1} \\
D_{21} &= - A_{22}^{-1} A_{21} (A_{11} - A_{12} A_{22}^{-1} A_{21})^{-1} \\
D_{22} &= (A_{22} - A_{21} A_{11}^{-1} A_{12})^{-1} \\
D_{12} &= - A_{11}^{-1} A_{12} (A_{22} - A_{21} A_{11}^{-1} A_{12})^{-1}
\end{aligned}
$$

Assuming that we know the inverses of A_{11} and of A_{22}, these formulae reduce the computation of the inverse of an $n \times n$ matrix to that of a $k \times k$ and an $(n-k) \times (n-k)$. Considering that, in general, P^3 computations are needed for the inversion of a matrix of order P, the number of computations in the partitioned scheme could be up to about 40 per cent less.

If, in addition, either D_{12} or D_{21} or both are null matrices, these formulas further simplify.

3) Inversion by Bordering

This method is really only a variant of the previous one. They differ only in that the bordering scheme is simply an iterated partitioning procedure.

For this method we have to assume that each one of the leading submatrices of the given matrix A is nonsingular. Thus, if

$$A = \begin{vmatrix} a_{11} & a_{12} & \cdots\cdots & a_{1n} \\ a_{21} & a_{22} & \cdots\cdots & a_{2n} \\ \cdot & \cdot & & \cdot \\ \cdot & \cdot & & \cdot \\ \cdot & \cdot & & \cdot \\ \cdot & \cdot & & \cdot \\ a_{n1} & a_{n2} & & a_{nn} \end{vmatrix}$$

where the a_{ij} may be submatrices, then we must have

$$\det(a_{11}) \neq 0$$

$$\det \begin{vmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{vmatrix} \neq 0$$

etc.

The process here is also simple; invert, in succession (by using the formulas of the previous section) the matrices

$$|a_{11}|$$

$$\begin{vmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{vmatrix}$$

$$\begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{vmatrix}$$

etc.

4) Inversion by the Minimum Function

This process utilizes the results of the Hamilton - Cayley theorem: every matrix A satisfies its characteristic equations. In fact, an $n \times n$ matrix will satisfy a polynomial equation of the form

$$f(x) = a_0 x^k + a_1 x^{k-1} + \dots + a_k = 0,$$

where the a's are constants and $k \leq n$. Assuming that, by an empirical method, we can find the above minimum function of the $n \times n$ matrix A, proceed as follows:

$$a_0 A^k + a_1 A^{k-1} + \dots + a_k I = 0$$

Therefore,

$$I = \frac{-1}{a_k} A \left(a_0 A^{k-1} + a_1 A^{k-2} + \dots + a_{k-2} A + a_{k-1} I\right)$$

and thus

$$A^{-1} = -\frac{1}{a_k} \left(a_0 A^{k-1} + a_1 A^{k-2} + \dots + a_{k-2} A + a_{k-1} I\right),$$

provided $a_k \neq 0$. However, it can be shown that if $a_k = 0$, then the matrix A is singular and there does not exist an inverse.

5) Special Analytical Methods

There exist several other analytical techniques; however, each one of them is, essentially, a step by step procedure. Therefore, as a rule, it is much more economical to use a computer when these methods are indicated. Some of these additional analytical methods are the following:

a) Pivotal Condensation Technique

b) Orthogonalization Technique

c) Factorization Technique

In addition to these, mention should be made of group theoretical methods. These do not actually invert a matrix; however, considerations of the symmetries of a given matrix, can reduce the computations by factors of 20 to 60; and are thus extremely important tools.

2.0 NUMERICAL INVERSION OF MATRICES

By a numerical method of matrix inversion we shall mean a technique, whereby the inverse of the given matrix A can be computed to any desired degree of accuracy. These methods are either matrix-iterational, or power series methods essentially. Indeed, one could characterize the latter by calling it an operational method of inversion.

As a rule, these techniques are most efficiently applied by high-speed computers, because of the large number of computations involved. Thus, while one may prefer one numerical scheme to others, occasionally the immediate availability of a computer program, based on a different technique, presents a dilemma. That is why it is necessary, even for one not involved with the actual computer work, to be familiar with these techniques. Matrix computational work has the sometimes inacceptable characteristic of forming small differences of large numbers - which might lack any accuracy or indeed, any meaning, for the given problem. Therefore, every one of the numerical methods has to be evaluated very carefully, with a view for trying to obtain an accuracy commensurate with that of the observations, which led to the determination of the entries of the original matrix.

1) Inversion by Perturbation

We shall describe this method by means of an example also. Let us consider the matrix A, and assume that its inverse (not known) is A^{-1}. Then

$$A A^{-1} = I ,$$

where I is the identity matrix.

In actual fact, we do not know what A^{-1} is; however, many of the methods of the previous section might be applicable to find a so-called approximate inverse A^*. In particular, we can write

$$A^{-1} = A^* + \epsilon A_1 + \epsilon^2 A_2 + \epsilon^3 A_3 + \dots .$$

where $\{A_1, A_2, A_3, \dots\}$ is a sequence of (as yet unknown) matrices and $0 \leq \epsilon < 1$.

Thus we can write

$$A A^{-1} = A \left[A^* + \epsilon A_1 + \epsilon^2 A_2 + \dots \right] = I$$

If we assume that A^* is an approximate inverse in the sense that

$$A A^* = I + \epsilon C,$$

where C is the "correction matrix", we can write

$$A A^{-1} = I + \epsilon C + \epsilon A A_1 + \epsilon^2 A A_2 + \epsilon^3 A A_3 + \ldots\ldots = I$$

Considering only the right hand side equality, we conclude that

$$C = -A \left[A_1 + \epsilon A_2 + \epsilon^2 A_3 + \ldots\ldots \right]$$

Further,

$$\left[A^* + \epsilon A_1 + \epsilon^2 A_2 + \ldots\ldots \right] C = - \left[A_1 + \epsilon A_2 + \epsilon^2 A_3 + \ldots \right]$$

where we can now equate the coefficients of ϵ, to obtain

$$\begin{aligned}
A^* C &= -A_1 \\
A_1 C &= -A_2 \\
A_2 C &= -A_3 \\
&\vdots \\
A_n C &= -A_{n+1} \\
&\vdots
\end{aligned}$$

This recurrence relationship can also be written in the form

$$A_1 = -A^* C$$

$$A_2 = A^* C^2$$

$$A_3 = -A^* C^3 .$$

$$\begin{array}{cc} \cdot & \cdot \\ \cdot & \cdot \\ \cdot & \cdot \end{array}$$

$$A_n = (-1)^n A^* C^n$$

$$\begin{array}{cc} \cdot & \cdot \\ \cdot & \cdot \\ \cdot & \cdot \end{array}$$

From this we see that the only requirement with respect to the approximate inverse A^* is that it be "accurate" enough in the sense of having a correction term converging to the 0 matrix. In particular, if we are fortunate (or skilled) enough to find an A^* such that

$$A A^* = I + \epsilon K ,$$

where K is nilpotent of order n, then the true inverse A^{-1} will be given by the finite matrix sum

$$A^{-1} = A^* + \sum_{k=0}^{n-1} \epsilon^k A_k$$

Thus, the accuracy of the inversion actually depends on the question of whether the elements of the correction matrix approach 0, in the successively higher powers. Let us note, in conclusion, that this can be determined a priori: if each of the sums of the absolute values of the elements in each row is less than one, then the powers of the correction matrix will converge to 0.

2) Other Numerical Techniques

The basic iterational scheme was given above. It has several variants (relaxation of base vectors, etc.), all based on the same principle. In addition to this, we might consider as numerical techniques any of the variations of the basic Gauss process, such as the square root, Doolittle, Crout, etc., techniques. By our definition, they become "numerical", when the number of necessary calculations exceeds a certain acceptable limit (which will be the case when there is no regularity or other simplifying effects in the matrix); at which time one would resort to a high-speed computer. It is well to point out here, that almost all computer programs utilize the Gauss process, because it consists of a large number of easily codable steps.

3.0 INVERSION OF SPECIAL MATRICES

1) Essentially Diagonal Matrices

These are matrices such that the absolute value of the diagonal element in any given row exceeds the sum of the absolute values of the other elements in that row. The guideline in inverting such matrices could be the fact, that the matrix formed by subtracting the unit matrix from the "normalized" essentially diagonal matrix(normalized here means the following: each row is multiplied by the inverse of the diagonal element) is one whose row-sums are all less than 1; and thus the iteration procedure outlined above can be used on it. Of course, if the matrix is strictly diagonal, whether by means of its basic elements or by submatrices, then the inversion is direct in terms of these.

2) Triangular Matrices

A triangular matrix is one in which each element above (below) the main diagonal is 0. The inversion of these is very simple: thus if

$$A = \begin{vmatrix} a_{11} & a_{12} & a_{13} & \cdots & a_{1n} \\ 0 & a_{22} & a_{23} & \cdots & a_{2n} \\ 0 & 0 & a_{33} & \cdots & a_{3n} \\ 0 & 0 & 0 & \cdots & a_{4n} \\ \cdot & \cdot & \cdot & & \cdot \\ \cdot & \cdot & \cdot & & \cdot \\ \cdot & \cdot & \cdot & & \cdot \\ \cdot & \cdot & \cdot & & \cdot \\ 0 & 0 & 0 & & a_{nn} \end{vmatrix}$$

and

$$A^{-1} = \begin{vmatrix} b_{11} & b_{12} & b_{13} & \cdots & b_{1n} \\ b_{21} & b_{22} & b_{23} & \cdots & b_{2n} \\ b_{31} & b_{32} & b_{33} & \cdots & b_{3n} \\ \cdot & \cdot & \cdot & & \cdot \\ \cdot & \cdot & \cdot & & \cdot \\ \cdot & \cdot & \cdot & & \cdot \\ \cdot & \cdot & \cdot & & \cdot \\ b_{n1} & b_{n2} & b_{n3} & \cdots & b_{nn} \end{vmatrix} ,$$

Simple computations show that

$$\begin{aligned} b_{11} &= a_{11}^{-1} \\ b_{i1} &= 0 \quad , \quad i > 1 \\ b_{12} &= -a_{11}^{-1} \; a_{12} \, a_{22}^{-1} \\ b_{22} &= a_{22}^{-1} \\ b_{i2} &= 0 \quad , \quad i > 2 \end{aligned}$$

and so on.

3) Factorizable Matrices

There occur on occasion matrices which can be, more or less readily, factorized. In principle,every matrix A can be uniquely factorized into the following form:

$$A = (T_L + D)\,(T_u + I) \;,$$

where T_L is a strictly lower triangular matrix (all elements on and above the diagonal are 0), T_u a strictly upper triangular, D a diagonal and I the unit matrix. Thus, if this factorization can be accomplished, the inverse of A will be given by

$$A^{-1} = \left(T_U + I\right)^{-1} \left(T_L + D\right)^{-1}$$

The indicated inverses of these two triangular matrices - which are themselves triangular - can be obtained quite easily by the method described in the section on such matrices.

5) Circulant Matrices

A matrix of the form

$$A = \begin{vmatrix} a_{11} & a_{12} & a_{13} & \cdots & a_{1(n-1)} & a_{1n} \\ a_{1n} & a_{11} & a_{12} & \cdots & a_{1(n-2)} & a_{1(n-1)} \\ \cdot & \cdot & \cdot & & \cdot & \cdot \\ \cdot & \cdot & \cdot & & \cdot & \cdot \\ \cdot & \cdot & \cdot & & \cdot & \cdot \\ \cdot & \cdot & \cdot & & \cdot & \cdot \\ a_{13} & a_{14} & a_{15} & \cdots & a_{11} & a_{12} \\ a_{12} & a_{13} & a_{13} & \cdots & a_{1n} & a_{11} \end{vmatrix}$$

is called a circulant matrix. In the inversion of this matrix the method utilizing the Cayley Hamilton theorem is often successful; since there exists an analytical expression for the eigenvalues of the matrix. These can then be used to construct the minimum function and thus obtain the inverse matrix A^{-1}.

The expression for the eigenvalues is the following:

$$\lambda_i = a_{11} + a_{12}\, x_i + a_{13}\, x_i^2 + \cdots + a_{1n}\, x_i^{n-1} ,$$

$$1 \le i \le n,$$

and where $x_i = \exp\left(2\pi\, i\, i/n \right)$

4) Band Matrices

A matrix in which only the main diagonal and a few of the diagonals adjacent to the main one are occupied by non-zero elements, is called a band, or a codiagonal, matrix. Such matrices, or ones easily transformable to this type, occur quite frequently in structural work and thus a somewhat more extended discussion of their inversion will be given below.

1) It is often possible to invert such matrices by the factorization method mentioned above. The reason is the following. If our band matrix A has the diagonal and k of the parallels above and below occupied by non-zero entries, then the factored form of it will be

$$A = (T_L + I)(T_U + D)$$

where both the matrices $(T_L + I)$ and $(T_U + D)$ will be band matrices, in which only the diagonal and the k codiagonals below and above, respectively, will be occupied by these non-zero entries. This consideration often facilitates factoring and thus inversion.

2) The perturbation technique of inversion gives good results with the inversion of band matrices. It can be applied in the following way: if

$$A = \left|\begin{array}{cc|cccc|cc} x_{11} & x_{12} & 0 & 0 & & & & \\ x_{21} & x_{22} & x_{23} & 0 & & \bigcirc & & \\ \hline 0 & x_{32} & x_{33} & x_{34} & & & & \\ 0 & 0 & \ddots & \ddots & \ddots & & & \\ & & & \ddots & \ddots & \ddots & & \\ & \bigcirc & & & \ddots & \ddots & \ddots & \\ \hline & & & & 0 & x_{(n-1)(n-2)} & x_{(n-1)(n-1)} & x_{(n-1)n} \\ & & & & 0 & 0 & x_{n(n-1)} & x_{nn} \end{array}\right|$$

is the given band matrix, for instance, we can partition it in the manner indicated. We can then immediately use, as our first (and usually very good) approximation to the true inverse A^{-1} the inverse of the diagonal matrix

$$
A^* = \left|\begin{array}{cc|cc|cccc|cc}
x_{11} & x_{12} & 0 & 0 & & & & & & \\
x_{21} & x_{22} & 0 & 0 & & & & O & & \\
\cline{1-4}
0 & 0 & x_{33} & x_{34} & & & & & & \\
0 & 0 & & \ddots & \ddots & \ddots & & & & \\
 & & & & \ddots & \ddots & \ddots & & & \\
 & O & & & & \ddots & \ddots & \ddots & & \\
\cline{5-10}
 & & & & 0 & 0 & & & x_{(n-1)(n-1)} & x_{(n-1)n} \\
 & & & & 0 & 0 & & & x_{n(n-1)} & x_{nn}
\end{array}\right|
$$

In fact, we can improve on the convergence of the indicated iteration process by reducing, as much as possible, the absolute values of those elements, which are deleted in the first approximation. This can usually be done by approximate elementary row and column operations. As will be seen shortly, the SIP technique is essentially the logical conclusion of this train of thought.

3) When one is more interested in solving the system

$$A\ x = b\ ,$$

(where A is a band matrix, x a column vector, and b a known column vector) than in the direct inversion of A itself, one can use yet another approach. By it, one would reduce the problem of inverting A to that of the inversion of a triangular matrix and another small matrix, whose order is the same as the number of diagonals occupied in A.

Suppose that A is of order n, $x = (x_1, x_2, x_3, \ldots . x_n)$, $b = [b_1, b_2, b_3, \ldots . b_n]$ and k diagonals of A contain non-zero elements. We begin by inverting the matrix $\overline{A}$, obtained from A by the deletion of its first $(k-1)$ columns and last $(k-1)$ rows. This will give the solution of the first $(n - k + 1)$ equations for $(n - k + 1)$ unknowns, in terms of the remaining $(k - 1)$. In practice, we obtain them by replacing, in the column vector b, each b_i by b_i - (elements deleted in the i'th row). From these linearly dependent equations we select any one; and using it with the $(k-1)$ equations, defined by the last $(k-1)$ deleted rows of A, we solve the small system of k equations in k unknowns.

Let us note also, that if A is non-singular but the reduced matrix is, we can still invert the latter. One arbitrarily replaces entries in the singular matrix and compensates for this by similar replacements in the column matrix b.

4.0 AN EXAMPLE

In the course of the analysis of a certain structure by means of transfer matrices, the problem of inverting a band matrix - known to be non-singular - composed of singular submatrices, arose. The matrix was

$$A = \begin{vmatrix} a & b & & & & & \\ C & 2a & b & & & \bigcirc & \\ & C & 2a & b & & & \\ & & C & 2a & b & & \\ & & & \ddots & \ddots & \ddots & \\ & \bigcirc & & & C & 2a & b \\ & & & & & C & a \end{vmatrix}$$

Here each of a, b, c is a singular 3×3 matrix and A itself is $6n \times 6n$. Examination revealed that the submatrices

$$A_0 = \begin{vmatrix} a & b \\ c & a \end{vmatrix}$$

$$A_1 = \begin{vmatrix} a & b \\ C & 2a \end{vmatrix}$$

$$A_2 = \begin{vmatrix} 2a & b \\ C & 2a \end{vmatrix}$$

$$A_3 = \begin{vmatrix} 2a & b \\ C & a \end{vmatrix}$$

are not singular.

Thus these were immediately inverted. However, it became soon clear that there did not exist a simple way of diagonalizing, or triangularizing, of A. The following three schemes, given in this example for the 4×4 case, were found more efficient.

a) Let us designate the inverse of A_0 by

$$A_0^{-1} = \begin{vmatrix} a & b \\ C & a \end{vmatrix}^{-1} = \begin{vmatrix} p_1 & q \\ q & p_2 \end{vmatrix}$$

Then the system

$$\begin{vmatrix} a & b & 0 & 0 \\ C & 2a & b & 0 \\ 0 & C & 2a & b \\ 0 & 0 & C & a \end{vmatrix} \begin{vmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \end{vmatrix} = \begin{vmatrix} b_1 \\ b_2 \\ b_3 \\ b_4 \end{vmatrix}$$

can be also written as

$$\begin{vmatrix} a & b & 0 & 0 \\ C & a & 0 & 0 \\ 0 & 0 & a & b \\ 0 & 0 & C & a \end{vmatrix} \begin{vmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \end{vmatrix} = \begin{vmatrix} b_1 \\ b_2{}^* \\ b_3{}^* \\ b_4 \end{vmatrix}$$

where

$$b_2^* = b_2 + a\,x_2 + b\,x_3$$

$$b_3^* = b_3 + C\,x_2 + a\,x_3$$

We can write the solution immediately as

$$\begin{vmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \end{vmatrix} = \begin{vmatrix} p_1 & q & 0 & 0 \\ q & p_2 & 0 & 0 \\ 0 & 0 & p_1 & q \\ 0 & 0 & q & p_2 \end{vmatrix} \begin{vmatrix} b_1 \\ b_2{}^* \\ b_3{}^* \\ b_4 \end{vmatrix}$$

From this however, we obtain, by inspection, the reduced system

$$\begin{vmatrix} 1 - p_2 a & - p_2 b \\ - p_1 C & 1 - p_1 a \end{vmatrix} \begin{vmatrix} x_2 \\ x_3 \end{vmatrix} = \begin{vmatrix} q\, b_1 + p_2 b_2 \\ q\, b_4 + p_1 b_3 \end{vmatrix}$$

Here, again, the coefficient matrix is easily inverted and thus the problem is solved. In conclusion: we reduced the inversion of a 4×4 (or really 12×12) to the inversions of two 2×2 (6×6) matrices. This means, in the general case, the reduction in the number of computations by a factor of 4.

b) A second method that can be effectively used on a very large order matrix of the previous type, is the following: if

$$A = \begin{vmatrix} A_1 & B & & & & \bigcirc \\ C & A_2 & B & & & \\ & C & A_2 & B & & \\ & & C & A_2 & B & \\ & & & C & A_2 & B \\ \bigcirc & & & & C & A_3 \end{vmatrix}$$

for example, where A_1, A_2 and A_3 are as defined in the previous section and

$$B = \begin{vmatrix} 0 & 0 \\ b & 0 \end{vmatrix}$$

$$C = \begin{vmatrix} 0 & C \\ 0 & 0 \end{vmatrix} ,$$

so that each entry in A is a 6×6 matrix. One can then eliminate, by elementary operations, the almost-null entries B and C. Specifically, since the A_i are non-singular, one proceeds as follows. Denoting the operation of adding k times a row R_i to another row R_j by

$$k\, R_i \longrightarrow R_j$$

and similarly for columns C_i and C_j, the scheme is

$$[-BA_1^{-1}]\,C_1 \longrightarrow C_2$$

$$[-CA_1^{-1}]\,R_1 \longrightarrow R_2$$

$$-\left\{B\,[A_2 - B A_1^{-1} C]^{-1}\right\} C_2 \longrightarrow C_3$$

$$-\left\{C\,[A_2 - B A_1^{-1} C]^{-1}\right\} R_2 \longrightarrow R_3$$

etc.

In these general terms, this scheme increases greatly in complexity from step to step. This is only because of the generality however; specifically, for instance,

$$B A_1^{-1} C = \begin{vmatrix} 0 & 0 \\ b & 0 \end{vmatrix} \begin{vmatrix} p_1 & q \\ q & p_2 \end{vmatrix} \begin{vmatrix} 0 & C \\ 0 & 0 \end{vmatrix} =$$

$$= \begin{vmatrix} 0 & 0 \\ b\,p_1 & b\,q \end{vmatrix} \begin{vmatrix} 0 & C \\ 0 & 0 \end{vmatrix} = \begin{vmatrix} 0 & 0 \\ 0 & b\,p_1\,C \end{vmatrix}$$

Thus, for instance, the product $C\,[A_2 - B A_1^{-1} C]^{-1}$ is given by

$$C\,[A_2 - B A_1^{-1} C]^{-1} = \begin{vmatrix} 0 & C \\ 0 & 0 \end{vmatrix} \begin{vmatrix} 2a & b \\ C & 2a - b\,p_1 C \end{vmatrix}^{-1}$$

$$= \begin{vmatrix} C\,S_{21} & C\,S_{22} \\ 0 & 0 \end{vmatrix} ,$$

where the S_{ij} are the appropriate entries in the indicated inverse.

On the other hand, however, one can ask the question whether, since the entries are matrices, one knows a priori that each one of the indicated inverses will exist? The answer to this is a categorical yes. The argument is this: by the elementary row and column operation we are factoring the matrix A into 3 matrices. Clearly, neither the left, or the right multiplier of the emerging diagonal A is singular. Since we know that the original matrix is non-singular, we can invoke Laplace's famous theorem, that the determinant of a matrix composed of sub-matrices along its diagonal is given by the product of the determinants of the sub-matrices. Thus, if any one of the inversions would be impossible, it would mean that the matrix A itself is singular, which we know not to be the case.

c) We can attack this problem in a purely operational manner also, which can be shown to be correct by the perturbational arguments of previous sections. This technique will be most effective in this particular case, if the products $b\,c$ and $c\,b$ of the basic submatrices b and c - which are singular here - are also nilpotent. Let us assume that this is so; in particular then, if $c\,b$ is nilpotent of order M and $b\,c$ of order N, then A^{-1} is expressible as the sum of K matrices, where $K = \max(M,N)$. One proceeds in the following manner: let

$$A^* = \left|\begin{array}{cc:cc:cc} a & b & & & & \\ C & 2a & & & \multicolumn{2}{c}{\bigcirc} \\ \hdashline & & 2a & b & & \\ & & C & 2a & & \\ \hdashline & & & & 2a & b \\ \multicolumn{2}{c}{\bigcirc} & & & C & a \end{array}\right|$$

and

$$A = \left|\begin{array}{cc:cc:cc} \multicolumn{2}{c}{\bigcirc} & & & \multicolumn{2}{c}{\bigcirc} \\ \hdashline & C & b & & & \\ & & \multicolumn{2}{c}{\bigcirc} & & \\ \hdashline & & & C & b & \\ \multicolumn{2}{c}{\bigcirc} & & & \multicolumn{2}{c}{\bigcirc} \end{array}\right| ,$$

so that $$A = A^* + \bar{A} .$$

Then, formally,

$$A^{-1} = [A^* + A]^{-1} = (A^*)^{-1} \left[1 - (A^*)^{-1}\bar{A} + (A^*)^{-2}\bar{A}^{-2} - \ldots\ldots\right]$$

Clearly, every even power of $\bar{A}$ is a diagonal matrix with the entries $(b\,c)^n$ and $(c\,b)^n$ on the diagonal. Thus, because of the nilpotency requirement,

$$\bar{A}^{-K} = 0$$

and A^{-1} is expressed as the sum of K matrices.

5.0 REDUNDANT STRUCTURES AND MATRICES

It happens very frequently that a structure, which is to be analyzed for the forces acting on it, is found to be redundant. This means that the equations of statics, when applied to the structure, contain more unknowns than the number of equations available from this source. This mathematical redundance, however, must be only an apparent one; if the structure is physically determinate. One, therefore, invokes the laws of elasticity to obtain the necessary additional equations of compatibility.

There is a mathematical description for this situation. Let us posit a structure S, for which the equations of statics give the system

$$A x = b$$

Here A is an $n \times n$ matrix, while x and b are column vectors. Since we are assuming that we have an insufficient number of equations, b is not constant; rather

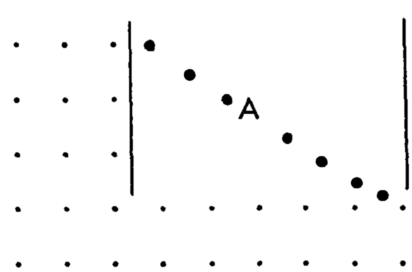
$$b = b(x)$$

We can assume, without any loss of generality, that A is a triangular matrix. For, if it is not, it can be factored into the product of two such matrices; and if the equation be multiplied on the left by the inverse of the left factor, followed by a redefinition of b, we do have the assumed situation. Further, it is plausible to expect that A is a triangular band matrix. The reason for this is that as one writes the equations of statics at point after point, the coupling between these equations occurs always with a different unknown; and, as a rule, every equation contains only a fraction of the unknowns.

The question now is: how does one adjoin to this set the compatibility equations arising from elasticity theory? If we enlarge the matrix A from $(n \times n)$ to $(n + k) \times (n + k)$, where k is the degree of redundancy, and rearrange the vectors x and b so that each will contain $(n + k)$ entries and b will be constant, then clearly we set up a system where the coefficient matrix is singular. In fact, the last k rows in it consists of zeros.

The equations of elasticity take their place in these rows of zeros, replacing the latter; rendering the coefficient matrix non-singular thereby. Thus, we have enlarged the triangular matrix by a bordering scheme of the following nature:

k extra rows



k extra columns

This is why we can expect in many of these situations to encounter a band matrix; its basic structure is already present in the original matrix A.

6.0 THE SUBMATRIX ITERATIVE PROCESS (SIP)

In the previous section several methods of matrix inversion were presented, with a trend towards the developments of the present chapter. Of the many particular techniques we shall now single out two, the combination of which will yield SIP. First, however, let us characterize these two building block methods by a comparison.

	Inversion by Iteration	Inversion by Partitioning
Domain of effective operation	Matrices the inverses of which are "almost" known	Matrices with nonsingular diagonal submatrices
Number of operations necessary to effect inversion	Approximately the same as in direct conventional methods	Smaller than by direct conventional methods; often by orders of magnitude.
Accuracy of inversion	Unlimited	Somewhat worse than by direct conventional methods
Automatic computation check	Yes	No

From this it becomes clear that a technique incorporating properties 1, 2 of the partitioning method, together with properties 3, 4 of the iterative one, would be much more efficient, accurate, and desirable than either one of the two by itself. Therefore, we shall now describe how to effect this combination of methods in the simplest situation.

Let us assume that A is a band matrix of order n and that for some $1 \leq k \leq \frac{n}{2}$ and k a divisor of n, A is strongly diagonal with respect to its diagonal submatrices A_i of order k. Let us further assume, that these submatrices are not singular. Then we proceed as follows:

SIP Scheme 1 (basic)

1) Obtain the inverses of the A_i by conventional methods.
2) As a first approximation to A^{-1}, form a matrix, diagonal with respect to its submatrices, and where these submatrices are the A_i^{-1}, in their original order.
3) Iterate this first approximation according to the process described in the section on iteration.
4) Stop the iteration when the desired accuracy is obtained.

There are quite a few restrictions on the matrix A . Therefore, one ought to ascertain, first of all, that there are some matrices which can be inverted by this method. Indeed there are: the simplest one being a purely diagonal matrix. In this simplest case $n = n$, $k = 1$, and the A_i are the elements of the matrix. In addition, here the first iteration gives the true inverse.

This scheme, however, is the most elementary possible; we shall now proceed to give two more sophisticated ones. These two will remove some of the restrictions of the basic method as outlined above. We shall refer to the first modification as "SIP Scheme 2 (operator controlled)"; for in using it one assumes the performance of certain tasks which are most profitably done by a human operator. The assumption on the matrix A under these operating conditions are the following:

Assume that A is a matrix of order n, transformable into a band matrix which is strongly diagonal with respect to some division (possibly non-uniform) into submatrices, by means of elementary matrix operations. Assume that these submatrices are non-singular.

Under these assumptions, one performs the diagonalization into the appropriate band matrix and then proceeds with SIP Scheme 1 on the transformed matrix. Thus, essentially, SIP Scheme 2 represents the addition of a preparatory step to SIP Scheme 1. The assumptions it removes or changes are the following:

a) The matrix A does not have to be a band matrix initially
b) The division into uniform submatrices is not necessary.

Thus, for instance, the matrix on the left below cannot be inverted by SIP 1, in general; but under the transformation on the right, it can:

$$\begin{vmatrix} & & a \\ & b & \\ c & & \end{vmatrix} \longrightarrow \begin{vmatrix} a & & \\ & b & \\ & & c \end{vmatrix}$$

The example is, of course, trivial; but it is worthy of noting that the entries a, b, c, can be matrices themselves. Let us now give an example of the second advantage of SIP 2 over SIP 1.

$$
\begin{vmatrix}
a_1 & a_2 & a_3 & & & & & \\
b_1 & b_2 & b_3 & b_4 & & & & \\
c_1 & c_2 & c_3 & c_4 & & & & \\
 & & d_1 & d_2 & d_3 & & & \\
 & & & e_1 & e_2 & e_3 & & \\
 & & & & & f_1 & f_2 & f_3 \\
 & & & & g_1 & g_2 & g_3 & g_4 \\
 & & & & h_1 & & & h_2
\end{vmatrix}
$$

Depending on the entries here, one might choose as the submatrices (proceeding from top left to bottom right) a 3×3, a 2×2, a 2×2 and a 1×1; or, perhaps a 3×3, a 2×2, and a 3×3; or else two 4×4's. In any case it is clear that the choice of size is an advantage. (Let us note here that all locations in these matrices, which are unoccupied by a symbol, are assumed to contain zeros).

Finally, we shall now describe "SIP Scheme 3 (automatic)". In order to emphasize the difference between this scheme and the preceding two, we shall characterize this variant by noting that its use is profitable in the inversion of matrices of very large order (say 200×200), where it is suspected that the matrix is strongly diagonal. The scheme is completely automatic.

SIP Scheme 3 (automatic)

1.) Select the diagonal 2×2 submatrices of A, invert each, and form a matrix from the inverses of the 2×2's, in their original order.

2.) Iterate this first approximation according to the process described in the section on iteration.

3.) Stop the iteration, when either a.) the desired accuracy is obtained or b.) divergence occurs.

4.) If divergence occurs, return to 1.) and start with a 3×3 division. If it turns out to diverge also, return with a 4×4 division, etc.

5.) Stop when either a) inverse is obtained or b) highest order iteration thought to be feasible is completed.

6.) Since in each iteration of order n the last submatrix is unlikely to be of order n also, invert it independently and place it in its position.

It would be well to point out a few facts about the economy of SIP 3. To give a concrete example, let us assume that we succeeded in inverting a 200×200 matrix with the fourth iteration (using its 5×5 submatrices).

By conventional methods (if the computer has enough storage to use conventional methods) the number of computations necessary to invert this matrix would be proportional to $(200)^3 = 8 \times 10^6$. On the other hand, one easily finds that by SIP 3, the number of operations necessary (including the first three unsuccessful trials) would be proportional to 11×10^3. Savings are therefore by a factor of almost 1000, which is significant.

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APPENDIX

This appendix contains a simple program, corresponding, essentially, to an elementary version of SIP 3; and some examples illustrating the success, inconclusiveness, or failure of it. The matrices used are 4 x 4, 6 x 6, 8 x 8, 10 x 10, and 12 x 12. As a first approximation to the inverse, simply the unit matrix of the appropriate order was used in most cases. The only two ways in which this was modified were the situations where a.) the individual entries on the diagonal were inverted, the other positions being replaced by zeros, and the resultant matrix was used as a first approximation; and b.) the 2 x 2 diagonal matrices were inverted to provide a first approximation, in a similar manner. Therefore, with such (purposely) crude approximations any degree of success is significant.

An attempt was made to use strongly diagonal matrices for the purposes of this experiment. In order to have an insight into the mechanics of the methods, each iteration was printed out by the computer. The designation "A" refers to the original matrix; "AS" is always the current approximation, while C is a correction matrix. In order to evaluate the goodness of the current AS, the product AAS was formed at each step. Finally, the computer was programmed to stop after a (small) fixed number of iterations.

THE EXAMPLES

1.) A 4x4 matrix is presented first. As a first approximation, the unit matrix was used. This attempt failed, in that in 15 steps convergence was not established. On the other hand the second approximation, using the two 2 x 2 diagonal submatrices, converged in 7 steps.

2.) The first trial for the inversion of the second example, a 6 x 6, clearly failed. Here we see the failure in that the exponent of 10 appearing in the printout reaches the value 10 after but seven iterations. On the other hand, 12 iterations of the second approximation yield an inverse accurate to six places.

3.) The 8 x 8 example illustrates the case where the second approximation fails also. Divergence is not as easy to detect, but it is clearly present.

4.) The second approximation of a 10 x 10 matrix, presented next, illustrates how this method can yield an inconclusive result. It is almost impossible to determine whether the tendency of the successive iterations is to convergence or to divergence.

5.) Finally, the last example is a 12 x 12. Only the second iteration is shown (the first one diverged) and it converges very well.

```
      PROGRAM TESTINVT
      COMMON A(12,12),AS(12,12),C(12,12),U(12,12)
C     N IS ORDER OF MATRIX, NO IS NUMBER OF CASES FOR STUDY
C     PROGRAM USES RANDOM NUMBER GENERATOR TO FORM A MATRIX
    1 FORMAT(38H TURN SS1 ON TO BEGIN FORMING A MATRIX)
    2 FORMAT(2I2)
    3 FORMAT (1H1,17H A MATRIX BY ROWS,//)
    4 FORMAT(12E10.2)
    5 FORMAT(2(//))
    6 FORMAT (18H A* MATRIX BY ROWS,//)
    7 FORMAT (1H1,1X,16HC MATRIX BY ROWS,//)
    8 FORMAT (12H A INVERSE*A,//)
      TEMP=-1.0
      Z=-2.
      WRITE(59,1)
    9 READ (60,2)N,NO
      IF(N)34,9,101
C     READ IN A MATRIX  WHERE A(I,J) IS  SQ MATRIX OF ORDER N
  101 GO TO (103,102),SSWTCHF(1)
  102 MN=IRAN(1.)
      GO TO 101
  103 CONTINUE
      DO 107 M=1,NO
      NI=0
      Z=Z+1.
      DO 105 I=1,N
      DO 105 J=1,N
      IF(I-J)104,106,104
  106 A(I,J)=1.0
      GO TO 105
  104 A(I,J)=FLOATF(IRAN(1.))/10000.
C     GIVES FLOATING PT. NO.  0 LE. A(I,J) L. 1.
  105 CONTINUE
      CALL PLACEZRO(Z,N)
      CONTINUE
      WRITE (61,3)
      DO 11 I=1,N
      WRITE (61,4) (A(I,J),J=1,N)
   11 CONTINUE
C     MAKE GUESS AT AS MATRIX WHERE AS IS THE A INVERSE MATRIX
      DO 44 I=1,N
      DO 44 J=1,N
      IF(I-J)13,12,13
   12 AS(I,J)=1.
      GO TO 44
   13 AS(I,J)=0.
   44 CONTINUE
   10 CONTINUE
      WRITE (61,5)
      WRITE (61,6)
      DO 14 I=1,N
      WRITE(61,4) (AS(I,J),J=1,N)
   14 CONTINUE
      DO 100 L=1,15
C     FORM C MATRIX, WHERE C=A*AS-IDENT MATRIX
      DO 15 I=1,N
      DO 15 J=1,N
      C(I,J)=0.0
      DO 16 K=1,N
   16 C(I,J)=C(I,J)+A(I,K)*AS(K,J)
      IF(I-J)18,17,18
   17 C(I,J)=C(I,J)-1.0
```

```
18    IF(ABSF(C(I,J))-1.E-06)19,19,15
19    C(I,J)=0.0
15    CONTINUE
      WRITE(61,7)
      DO 21 I=1,N
      WRITE(61,4) (C(I,J),J=1,N)
21    CONTINUE
      DO 23 I=1,N
      DO 23 J=1,N
      D(I,J)=0.0
      Q=0.0
      DO 22 K=1,N
22    Q=Q+AS(I,K)*C(K,J)
      D(I,J)=Q
23    CONTINUE
      DO 24 I=1,N
      DO 24 J=1,N
      AS(I,J)=AS(I,J)+TEMP*D(I,J)
      IF(ABSF(AS(I,J))-1.E-06)25,25,24
25    AS(I,J)=0.0
24    CONTINUE
      WRITE(61,5)
      WRITE(61,6)
      DO 26 I=1,N
      WRITE(61,4)(AS(I,J),J=1,N)
26    CONTINUE
      WRITE (61,5)
      WRITE (61,8)
      DO 29 I=1,N
      DO 29 J=1,N
      D(I,J)=0.0
      DO 27 K=1,N
27    D(I,J)=D(I,J)+A(I,K)*AS(K,J)
      IF(ABSF(D(I,J))-1.E-06)28,28,29
28    D(I,J)=0.0
29    CONTINUE
      TEMP=-TEMP
      DO 30 I=1,N
      WRITE (61,4) (D(I,J),J=1,N)
30    CONTINUE
      DO 110 I=1,N
      DO 110 J=1,N
      IF(ABSF(C(I,J))-1.E-06)110,110,111
110   CONTINUE
      GO TO 109
111   CONTINUE
      DO 33 I=1,N
      DO 33 J=1,N
      IF(I-J)32,36,32
36    IF(ABSF(D(I,J))-1.E+06)31,31,109
31    IF(D(I,J)-1.)100,33,35
35    IF(D(I,J)-1.E-06)33,33,100
32    IF(ABSF(D(I,J))-0.)100,33,100
33    CONTINUE
      GO TO 9
100   CONTINUE
109   NI=NI+1
      IF(NI-2)108,107,107
108   CALL ANEWAS(N,TEMP)
      IF(NI-2)10,107,107
107   CONTINUE
      GO TO 9
34    PAUSE2
      END
```

3200 FORTRAN DIAGNOSTIC RESULTS - FOR TESTINVT

A MATRIX BY ROWS

1.00E 00	2.39E-02	0	0
1.67E-01	1.00E 00	1.05E-01	0
0	4.09E-01	1.00E 00	1.39E-01
0	0	2.50E-01	1.00E 00

A* MATRIX BY ROWS

1.00E 00	0	0	0
0	1.00E 00	0	0
0	0	1.00E 00	0
0	0	0	1.00E 00

C MATRIX BY ROWS

0	2.39E-02	0	0
1.67E-01	0	1.05E-01	0
0	4.09E-01	0	1.39E-01
0	0	2.50E-01	0

A* MATRIX BY ROWS

1.00E 00	2.39E-02	0	0
1.67E-01	1.00E 00	1.05E-01	0
0	4.09E-01	1.00E 00	1.39E-01
0	0	2.50E-01	1.00E 00

A INVERSE*A

1.00E 00	4.78E-02	2.51E-03	0
3.34E-01	1.05E 00	2.10E-01	1.45E-02
6.83E-02	8.18E-01	1.08E 00	2.77E-01
0	1.02E-01	5.01E-01	1.03E 00

C MATRIX BY ROWS

3.99E-03	4.78E-02	2.51E-03	0
3.34E-01	4.69E-02	2.10E-01	1.45E-02
6.83E-02	8.18E-01	7.76E-02	2.77E-01
0	1.02E-01	5.01E-01	3.47E-02

A* MATRIX BY ROWS

9.88E-01	-2.50E-02	-7.52E-03	-3.47E-04
-1.75E-01	8.59E-01	-1.13E-01	-4.36E-02
-2.05E-01	-4.42E-01	7.67E-01	-1.49E-01
-1.71E-02	-3.07E-01	-2.70E-01	8.96E-01

A INVERSE*A

9.84E-01	-4.48E-03	-1.02E-02	-1.39E-03
-3.13E-02	8.09E-01	-3.42E-02	-5.93E-02
-2.79E-01	-1.34E-01	6.83E-01	-4.30E-02
-6.84E-02	-4.18E-01	-7.78E-02	8.58E-01

C MATRIX BY ROWS

-1.61E-02	-4.48E-03	-1.02E-02	-1.39E-03
-3.13E-02	-1.91E-01	-3.42E-02	-5.93E-02
-2.79E-01	-1.34E-01	-3.17E-01	-4.30E-02
-6.84E-02	-4.18E-01	-7.78E-02	-1.42E-01

A* MATRIX BY ROWS

9.75E-01	-2.35E-02	-1.44E-02	1.37E-04
-1.64E-01	7.29E-01	-1.02E-01	-8.33E-02
-3.91E-01	-3.97E-01	5.53E-01	-1.35E-01
6.74E-03	-5.87E-01	-2.43E-01	7.99E-01

A INVERSE*A

9.71E-01	-6.09E-03	-1.68E-02	-1.85E-03
-4.25E-02	6.84E-01	-4.62E-02	-9.74E-02
-4.57E-01	-1.80E-01	4.78E-01	-5.80E-02
-9.13E-02	-6.87E-01	-1.05E-01	7.65E-01

C MATRIX BY ROWS

```
-2.89E-02 -6.09E-03 -1.68E-02 -1.85E-03
-4.25E-02 -3.16E-01 -4.62E-02 -9.74E-02
-4.57E-01 -1.80E-01 -5.22E-01 -5.80E-02
-9.13E-02 -6.87E-01 -1.05E-01 -2.35E-01
```

A* MATRIX BY ROWS

```
 9.96E-01 -2.75E-02 -6.56E-03 -1.15E-03
-1.92E-01  8.83E-01 -1.33E-01 -3.81E-02
-1.79E-01 -5.18E-01  8.03E-01 -1.74E-01
-5.65E-02 -2.68E-01 -3.14E-01  9.15E-01
```

A INVERSE*A

```
 9.91E-01 -6.40E-03 -9.74E-03 -2.06E-03
-4.47E-02  8.24E-01 -4.97E-02 -5.65E-02
-2.65E-01 -1.94E-01  7.05E-01 -6.23E-02
-1.01E-01 -3.98E-01 -1.13E-01  8.72E-01
```

C MATRIX BY ROWS

```
-8.95E-03 -6.40E-03 -9.74E-03 -2.06E-03
-4.47E-02 -1.76E-01 -4.97E-02 -5.65E-02
-2.65E-01 -1.94E-01 -2.95E-01 -6.23E-02
-1.01E-01 -3.98E-01 -1.13E-01 -1.28E-01
```

A* MATRIX BY ROWS

```
 9.90E-01 -2.73E-02 -1.28E-02 -1.09E-03
-1.91E-01  7.70E-01 -1.31E-01 -7.44E-02
-3.49E-01 -5.12E-01  6.13E-01 -1.72E-01
-5.35E-02 -5.24E-01 -3.10E-01  8.33E-01
```

A INVERSE*A

```
 9.85E-01 -8.92E-03 -1.60E-02 -2.86E-03
-6.23E-02  7.12E-01 -6.91E-02 -9.26E-02
-4.35E-01 -2.70E-01  5.16E-01 -8.68E-02
-1.41E-01 -6.53E-01 -1.57E-01  7.90E-01
```

C MATRIX BY ROWS

```
-1.47E-02 -8.92E-03 -1.60E-02 -2.86E-03
-6.23E-02 -2.88E-01 -6.91E-02 -9.26E-02
-4.35E-01 -2.70E-01 -4.84E-01 -8.68E-02
-1.41E-01 -6.53E-01 -1.57E-01 -2.10E-01
```

A* MATRIX BY ROWS

```
 9.97E-01 -3.05E-02 -5.29E-03 -2.12E-03
-2.13E-01  9.06E-01 -1.56E-01 -3.07E-02
-1.44E-01 -6.10E-01  8.42E-01 -2.03E-01
-1.05E-01 -2.16E-01 -3.67E-01  9.32E-01
```

A INVERSE*A

```
 9.92E-01 -8.87E-03 -9.02E-03 -2.86E-03
-6.20E-02  8.37E-01 -6.89E-02 -5.23E-02
-2.46E-01 -2.69E-01  7.27E-01 -8.65E-02
-1.41E-01 -3.69E-01 -1.56E-01  8.81E-01
```

C MATRIX BY ROWS

```
-8.12E-03 -8.87E-03 -9.02E-03 -2.86E-03
-6.20E-02 -1.63E-01 -6.89E-02 -5.23E-02
-2.46E-01 -2.69E-01 -2.73E-01 -8.65E-02
-1.41E-01 -3.69E-01 -1.56E-01 -1.19E-01
```

A* MATRIX BY ROWS

```
 9.92E-01 -3.22E-02 -1.04E-02 -2.66E-03
-2.25E-01  8.14E-01 -1.69E-01 -6.03E-02
-2.83E-01 -6.60E-01  6.87E-01 -2.19E-01
-1.31E-01 -4.25E-01 -3.97E-01  8.65E-01
```

A INVERSE*A

```
 9.87E-01 -1.28E-02 -1.45E-02 -4.11E-03
-8.91E-02  7.40E-01 -9.90E-02 -8.38E-02
-3.94E-01 -3.86E-01  5.63E-01 -1.24E-01
-2.02E-01 -5.91E-01 -2.25E-01  8.10E-01
```

C MATRIX BY ROWS

-1.30E-02	-1.28E-02	-1.45E-02	-4.11E-03
-8.91E-02	-2.60E-01	-9.90E-02	-8.38E-02
-3.94E-01	-3.86E-01	-4.37E-01	-1.24E-01
-2.02E-01	-5.91E-01	-2.25E-01	-1.90E-01

A* MATRIX BY ROWS

9.98E-01	-3.35E-02	-4.40E-03	-3.09E-03
-2.34E-01	9.22E-01	-1.80E-01	-2.55E-02
-1.20E-01	-7.00E-01	8.68E-01	-2.32E-01
-1.52E-01	-1.80E-01	-4.20E-01	9.44E-01

A INVERSE*A

9.92E-01	-1.15E-02	-8.69E-03	-3.70E-03
-8.02E-02	8.43E-01	-8.92E-02	-5.04E-02
-2.37E-01	-3.48E-01	7.37E-01	-1.12E-01
-1.82E-01	-3.55E-01	-2.02E-01	8.86E-01

C MATRIX BY ROWS

-7.82E-03	-1.15E-02	-8.69E-03	-3.70E-03
-8.02E-02	-1.57E-01	-8.92E-02	-5.04E-02
-2.37E-01	-3.48E-01	-2.63E-01	-1.12E-01
-1.82E-01	-3.55E-01	-2.02E-01	-1.14E-01

A* MATRIX BY ROWS

9.94E-01	-3.71E-02	-8.30E-03	-4.24E-03
-2.59E-01	8.52E-01	-2.07E-01	-4.81E-02
-2.26E-01	-8.09E-01	7.50E-01	-2.67E-01
-2.09E-01	-3.39E-01	-4.83E-01	8.92E-01

A INVERSE*A

9.88E-01	-1.68E-02	-1.33E-02	-5.39E-03
-1.17E-01	7.61E-01	-1.30E-01	-7.69E-02
-3.61E-01	-5.07E-01	5.99E-01	-1.63E-01
-2.65E-01	-5.42E-01	-2.95E-01	8.26E-01

C MATRIX BY ROWS

-1.19E-02	-1.68E-02	-1.33E-02	-5.39E-03
-1.17E-01	-2.39E-01	-1.30E-01	-7.69E-02
-3.61E-01	-5.07E-01	-4.01E-01	-1.63E-01
-2.65E-01	-5.42E-01	-2.95E-01	-1.74E-01

A* MATRIX BY ROWS

9.98E-01	-3.58E-02	-4.53E-03	-3.83E-03
-2.50E-01	9.20E-01	-1.97E-01	-2.63E-02
-1.23E-01	-7.70E-01	8.65E-01	-2.55E-01
-1.89E-01	-1.85E-01	-4.60E-01	9.42E-01

A INVERSE*A

9.92E-01	-1.38E-02	-9.25E-03	-4.46E-03
-9.67E-02	8.33E-01	-1.08E-01	-5.36E-02
-2.52E-01	-4.19E-01	7.20E-01	-1.35E-01
-2.19E-01	-3.78E-01	-2.44E-01	8.78E-01

C MATRIX BY ROWS

-8.32E-03	-1.38E-02	-9.25E-03	-4.46E-03
-9.67E-02	-1.67E-01	-1.08E-01	-5.36E-02
-2.52E-01	-4.19E-01	-2.80E-01	-1.35E-01
-2.19E-01	-3.78E-01	-2.44E-01	-1.22E-01

A* MATRIX BY ROWS

9.95E-01	-4.03E-02	-7.70E-03	-5.28E-03
-2.82E-01	8.63E-01	-2.32E-01	-4.47E-02
-2.10E-01	-9.06E-01	7.69E-01	-2.99E-01
-2.60E-01	-3.15E-01	-5.40E-01	9.00E-01

A INVERSE*A

9.88E-01	-1.97E-02	-1.33E-02	-6.34E-03
-1.38E-01	7.61E-01	-1.53E-01	-7.69E-02
-3.61E-01	-5.97E-01	5.99E-01	-1.92E-01
-3.12E-01	-5.42E-01	-3.47E-01	8.26E-01

C MATRIX BY ROWS

```
-1.19E-02 -1.97E-02 -1.33E-02 -6.34E-03
-1.38E-01 -2.39E-01 -1.53E-01 -7.69E-02
-3.61E-01 -5.97E-01 -4.01E-01 -1.92E-01
-3.12E-01 -5.42E-01 -3.47E-01 -1.74E-01
```

A* MATRIX BY ROWS

```
 9.97E-01 -3.78E-02 -5.61E-03 -4.47E-03
-2.64E-01  9.01E-01 -2.13E-01 -3.25E-02
-1.53E-01 -8.30E-01  8.32E-01 -2.74E-01
-2.20E-01 -2.29E-01 -4.95E-01  9.28E-01
```

A INVERSE*A

```
 9.90E-01 -1.63E-02 -1.07E-02 -5.24E-03
-1.14E-01  8.07E-01 -1.26E-01 -6.20E-02
-2.91E-01 -4.93E-01  6.76E-01 -1.59E-01
-2.58E-01 -4.37E-01 -2.87E-01  8.59E-01
```

C MATRIX BY ROWS

```
-9.62E-03 -1.63E-02 -1.07E-02 -5.24E-03
-1.14E-01 -1.93E-01 -1.26E-01 -6.20E-02
-2.91E-01 -4.93E-01 -3.24E-01 -1.59E-01
-2.58E-01 -4.37E-01 -2.87E-01 -1.41E-01
```

A* MATRIX BY ROWS

```
 9.94E-01 -4.20E-02 -8.39E-03 -5.83E-03
-2.94E-01  8.51E-01 -2.46E-01 -4.87E-02
-2.29E-01 -9.58E-01  7.48E-01 -3.15E-01
-2.87E-01 -3.43E-01 -5.70E-01  8.91E-01
```

A INVERSE*A

```
 9.87E-01 -2.17E-02 -1.43E-02 -6.99E-03
-1.52E-01  7.43E-01 -1.69E-01 -8.27E-02
-3.88E-01 -6.58E-01  5.68E-01 -2.12E-01
-3.44E-01 -5.83E-01 -3.83E-01  8.12E-01
```

C MATRIX BY ROWS

```
-1.28E-02 -2.17E-02 -1.43E-02 -6.99E-03
-1.52E-01 -2.57E-01 -1.69E-01 -8.27E-02
-3.88E-01 -6.58E-01 -4.32E-01 -2.12E-01
-3.44E-01 -5.83E-01 -3.83E-01 -1.88E-01
```

A* MATRIX BY ROWS

```
 9.95E-01 -4.02E-02 -7.15E-03 -5.22E-03
-2.81E-01  8.73E-01 -2.31E-01 -4.15E-02
-1.95E-01 -9.01E-01  7.85E-01 -2.97E-01
-2.57E-01 -2.92E-01 -5.37E-01  9.08E-01
```

A INVERSE*A

```
 9.89E-01 -1.93E-02 -1.27E-02 -6.22E-03
-1.35E-01  7.72E-01 -1.50E-01 -7.35E-02
-3.45E-01 -5.85E-01  6.16E-01 -1.88E-01
-3.06E-01 -5.18E-01 -3.40E-01  8.33E-01
```

C MATRIX BY ROWS

```
-1.14E-02 -1.93E-02 -1.27E-02 -6.22E-03
-1.35E-01 -2.28E-01 -1.50E-01 -7.35E-02
-3.45E-01 -5.85E-01 -3.84E-01 -1.88E-01
-3.06E-01 -5.18E-01 -3.40E-01 -1.67E-01
```

A* MATRIX BY ROWS

```
 9.93E-01 -4.33E-02 -9.23E-03 -6.24E-03
-3.03E-01  8.36E-01 -2.56E-01 -5.35E-02
-2.51E-01 -9.97E-01  7.22E-01 -3.28E-01
-3.07E-01 -3.77E-01 -5.92E-01  8.80E-01
```

A INVERSE*A

```
 9.86E-01 -2.34E-02 -1.53E-02 -7.52E-03
-1.63E-01  7.24E-01 -1.81E-01 -8.89E-02
-4.18E-01 -7.07E-01  5.36E-01 -2.28E-01
-3.70E-01 -6.27E-01 -4.11E-01  7.98E-01
```

A MATRIX BY ROWS

1.00E 00	2.39E-02	0	0
1.67E-01	1.00E 00	1.05E-01	0
0	4.09E-01	1.00E 00	1.39E-01
0	0	2.50E-01	1.00E 00

A* MATRIX BY ROWS

1.00E 00	-2.39E-02	0	0
-1.67E-01	1.00E 00	0	0
0	0	1.00E 00	-1.39E-01
0	0	-2.50E-01	1.00E 00

C MATRIX BY ROWS

-3.99E-03	0	0	0
0	-3.99E-03	1.05E-01	-1.45E-02
-6.83E-02	4.09E-01	-3.47E-02	0
0	0	0	-3.47E-02

A* MATRIX BY ROWS

1.00E 00	-2.40E-02	2.51E-03	-3.47E-04
-1.68E-01	1.00E 00	-1.05E-01	1.45E-02
6.83E-02	-4.09E-01	1.03E 00	-1.43E-01
-1.71E-02	1.02E-01	-2.59E-01	1.03E 00

A INVERSE*A

1.00E-00	0	0	0
7.16E-03	9.57E-01	4.06E-03	-5.63E-04
-2.64E-03	1.58E-02	9.56E-01	5.95E-03
0	0	0	9.99E-01

C MATRIX BY ROWS

-1.59E-05	0	0	0
7.16E-03	-4.29E-02	4.06E-03	-5.63E-04
-2.64E-03	1.58E-02	-4.41E-02	5.95E-03
0	0	0	-1.21E-03

A* MATRIX BY ROWS

1.00E 00	-2.29E-02	2.30E-03	-3.19E-04
-1.60E-01	9.59E-01	-9.62E-02	1.33E-02
6.26E-02	-3.75E-01	9.87E-01	-1.37E-01
-1.57E-02	9.40E-02	-2.47E-01	1.03E 00

A INVERSE*A

1.00E-00	0	0	0
1.40E-02	9.16E-01	7.77E-03	-1.08E-03
-5.06E-03	3.03E-02	9.14E-01	1.16E-02
0	0	0	9.98E-01

C MATRIX BY ROWS

-3.18E-05	0	0	0
1.40E-02	-8.40E-02	7.77E-03	-1.08E-03
-5.06E-03	3.03E-02	-8.62E-02	1.16E-02
0	0	0	-2.41E-03

A* MATRIX BY ROWS

1.00E 00	-2.49E-02	2.68E-03	-3.71E-04
-1.74E-01	1.04E 00	-1.12E-01	1.55E-02
7.29E-02	-4.37E-01	1.08E 00	-1.49E-01
-1.83E-02	1.09E-01	-2.69E-01	1.04E 00

A INVERSE*A

1.00E-00	0	0	0
1.22E-03	9.93E-01	1.32E-03	-1.83E-04
-8.60E-04	5.16E-03	9.92E-01	1.06E-03
0	0	0	1.00E-00

C MATRIX BY ROWS

0	0	0	0
1,22E-03	-7,28E-03	1,32E-03	-1,83E-04
-8,60E-04	5,16E-03	-7,67E-03	1,06E-03
0	0	0	-5,81E-06

A* MATRIX BY ROWS

1,00E 00	-2,47E-02	2,62E-03	-3,63E-04
-1,73E-01	1.03E 00	-1,10E-01	1,52E-02
7,14E-02	-4,28E-01	1,07E 00	-1,48E-01
-1,79E-02	1,07E-01	-2,67E-01	1,04E 00

A INVERSE*A

1,00E-00	0	0	0
2,42E-03	9,85E-01	2,62E-03	-3,64E-04
-1,71E-03	1,02E-02	9,85E-01	2,12E-03
0	0	0	1,00E-00

C MATRIX BY ROWS

0	0	0	0
2,42E-03	-1,45E-02	2,62E-03	-3,64E-04
-1,71E-03	1,02E-02	-1,53E-02	2,12E-03
0	0	0	-1,16E-05

A* MATRIX BY ROWS

1,00E 00	-2,51E-02	2,73E-03	-3,78E-04
-1,75E-01	1,05E 00	-1,14E-01	1,58E-02
7,43E-02	-4,45E-01	1,08E 00	-1,50E-01
-1,86E-02	1,11E-01	-2,72E-01	1,04E 00

A INVERSE*A

1,00E-00	0	0	0
3,96E-05	1.00E-00	7,82E-05	-1,08E-05
-5,09E-05	3.05E-04	1.00E-00	3,61E-05
0	0	0	1,00E-00

C MATRIX BY ROWS

0	0	0	0
3,96E-05	-2,37E-04	7,82E-05	-1,08E-05
-5,09E-05	3,05E-04	-2,60E-04	3,61E-05
0	0	0	0

A* MATRIX BY ROWS

1,00E 00	-2,51E-02	2,72E-03	-3,78E-04
-1,75E-01	1,05E 00	-1,14E-01	1,58E-02
7,42E-02	-4,45E-01	1,08E 00	-1,50E-01
-1,86E-02	1,11E-01	-2,71E-01	1,04E 00

A INVERSE*A

1,00E-00	0	0	0
7,92E-05	1,00E-00	1,56E-04	-2,17E-05
-1,02E-04	6.09E-04	9,99E-01	7,21E-05
0	0	0	1,00E-00

C MATRIX BY ROWS

0	0	0	0
7,92E-05	-4,75E-04	1,56E-04	-2,17E-05
-1,02E-04	6,09E-04	-5,20E-04	7,21E-05
0	0	0	0

A* MATRIX BY ROWS

1,00E 00	-2,51E-02	2,73E-03	-3,78E-04
-1,75E-01	1,05E 00	-1,14E-01	1,58E-02
7,43E-02	-4.45E-01	1,08E 00	-1,50E-01
-1,86E-02	1,12E-01	-2,72E-01	1,04E 00

A INVERSE*A

1,00E-00	0	0	0
0	1.00E-00	0	0
0	0	1,00E-00	0
0	0	0	1,00E-00

A MATRIX BY ROWS

1.00E 00	2.90E-01	7.73E-02	2.54E-01	0	0
3.72E-01	1.00E 00	1.06E-02	3.21E-01	3.02E-01	0
2.67E-01	3.29E-01	1.00E 00	2.86E-01	2.52E-02	2.95E-01
1.00E-01	1.10E-01	1.50E-01	1.00E 00	2.73E-01	3.03E-01
0	8.43E-02	3.40E-01	2.89E-01	1.00E 00	1.26E-01
0	0	1.61E-01	2.15E-01	1.38E-01	1.00E 00

A* MATRIX BY ROWS

1.00E 00	0	0	0	0	0
0	1.00E 00	0	0	0	0
0	0	1.00E 00	0	0	0
0	0	0	1.00E 00	0	0
0	0	0	0	1.00E 00	0
0	0	0	0	0	1.00E 00

C MATRIX BY ROWS

0	2.91E-01	7.73E-02	2.54E-01	0	0
3.72E-01	0	1.06E-02	3.21E-01	3.02E-01	0
2.67E-01	3.29E-01	0	2.86E-01	2.52E-02	2.95E-01
1.00E-01	1.10E-01	1.50E-01	0	2.73E-01	3.03E-01
0	8.43E-02	3.40E-01	2.89E-01	0	1.26E-01
0	0	1.61E-01	2.15E-01	1.38E-01	0

A* MATRIX BY ROWS

1.00E 00	2.91E-01	7.73E-02	2.54E-01	0	0
3.72E-01	1.00E 00	1.06E-02	3.21E-01	3.02E-01	0
2.67E-01	3.29E-01	1.00E 00	2.86E-01	2.52E-02	2.95E-01
1.00E-01	1.10E-01	1.50E-01	1.00E 00	2.73E-01	3.03E-01
0	8.43E-02	3.40E-01	2.89E-01	1.00E 00	1.26E-01
0	0	1.61E-01	2.15E-01	1.38E-01	1.00E 00

A INVERSE*A

1.15E 00	6.34E-01	1.96E-01	6.23E-01	1.59E-01	9.98E-02
7.79E-01	1.17E 00	2.01E-01	8.26E-01	6.92E-01	1.38E-01
6.84E-01	7.69E-01	1.12E 00	8.17E-01	2.68E-01	6.80E-01
2.81E-01	3.21E-01	4.51E-01	1.25E 00	6.24E-01	6.85E-01
1.51E-01	3.12E-01	7.44E-01	7.29E-01	1.13E 00	4.40E-01
6.45E-02	8.82E-02	4.01E-01	5.16E-01	3.38E-01	1.13E 00

C MATRIX BY ROWS

1.54E-01	6.34E-01	1.96E-01	6.23E-01	1.59E-01	9.98E-02
7.79E-01	1.72E-01	2.01E-01	8.26E-01	6.92E-01	1.38E-01
6.84E-01	7.69E-01	1.23E-01	8.17E-01	2.68E-01	6.80E-01
2.81E-01	3.21E-01	4.51E-01	2.47E-01	6.24E-01	6.85E-01
1.51E-01	3.12E-01	7.44E-01	7.29E-01	1.30E-01	4.40E-01
6.45E-02	8.82E-02	4.01E-01	5.16E-01	3.38E-01	1.30E-01

A* MATRIX BY ROWS

4.95E-01	-5.35E-01	-3.01E-01	-7.35E-01	-5.39E-01	-3.66E-01
-6.07E-01	3.86E-01	-6.34E-01	-1.05E 00	-6.91E-01	-5.35E-01
-8.19E-01	-7.92E-01	4.92E-01	-1.21E 00	-7.95E-01	-7.02E-01
-4.45E-01	-5.21E-01	-6.85E-01	1.22E-01	-6.21E-01	-6.68E-01
-5.38E-01	-6.08E-01	-6.44E-01	-9.24E-01	4.98E-01	-7.70E-01
-2.56E-01	-3.24E-01	-4.59E-01	-5.86E-01	-3.96E-01	5.53E-01

A INVERSE*A

1.42E-01	-6.16E-01	-6.21E-01	-1.10E 00	-9.59E-01	-7.46E-01
-7.37E-01	-1.72E-01	-1.15E 00	-1.57E 00	-9.49E-01	-1.13E 00
-1.10E 00	-1.07E 00	-1.45E-01	-1.91E 00	-1.45E 00	-1.02E 00
-8.10E-01	-9.15E-01	-1.03E 00	-6.78E-01	-8.55E-01	-9.12E-01
-1.03E 00	-1.04E 00	-7.86E-01	-1.46E 00	-5.98E-02	-1.18E 00
-5.58E-01	-6.47E-01	-6.16E-01	-8.82E-01	-5.89E-01	1.90E-01

C MATRIX BY ROWS

-8.58E-01	-6.16E-01	-6.21E-01	-1.10E 00	-9.59E-01	-7.46E-01
-7.37E-01	-1.17E 00	-1.15E 00	-1.57E 00	-9.49E-01	-1.13E 00
-1.10E 00	-1.07E 00	-1.14E 00	-1.91E 00	-1.45E 00	-1.02E 00
-8.10E-01	-9.15E-01	-1.03E 00	-1.68E 00	-8.55E-01	-9.12E-01
-1.03E 00	-1.04E 00	-7.86E-01	-1.46E 00	-1.06E 00	-1.18E 00
-5.58E-01	-6.47E-01	-6.16E-01	-8.82E-01	-5.89E-01	-8.10E-01

A* MATRIX BY ROWS

2.15E 00	1.58E 00	1.76E 00	2.48E 00	1.34E 00	1.78E 00
2.18E 00	3.00E 00	1.97E 00	3.46E 00	2.38E 00	2.33E 00
2.11E 00	2.50E 00	3.65E 00	3.81E 00	2.32E 00	2.90E 00
1.99E 00	2.06E 00	1.75E 00	4.03E 00	2.24E 00	2.11E 00
1.75E 00	1.95E 00	2.16E 00	3.36E 00	3.24E 00	1.86E 00
1.28E 00	1.29E 00	1.17E 00	2.16E 00	1.42E 00	2.13E 00

A INVERSE*A

3.45E 00	3.16E 00	3.06E 00	4.80E 00	2.79E 00	3.22E 00
4.17E 00	4.87E 00	3.87E 00	6.73E 00	4.60E 00	4.26E 00
4.40E 00	4.93E 00	5.67E 00	7.48E 00	4.60E 00	5.43E 00
3.63E 00	3.85E 00	3.64E 00	6.80E 00	4.30E 00	4.14E 00
3.39E 00	3.81E 00	4.22E 00	6.38E 00	5.05E 00	3.92E 00
2.29E 00	2.41E 00	2.43E 00	4.10E 00	2.72E 00	3.31E 00

C MATRIX BY ROWS

2.45E 00	3.16E 00	3.06E 00	4.80E 00	2.79E 00	3.22E 00
4.17E 00	3.87E 00	3.87E 00	6.73E 00	4.60E 00	4.26E 00
4.40E 00	4.93E 00	4.67E 00	7.48E 00	4.60E 00	5.43E 00
3.63E 00	3.85E 00	3.64E 00	5.80E 00	4.30E 00	4.14E 00
3.39E 00	3.81E 00	4.22E 00	6.38E 00	4.05E 00	3.92E 00
2.29E 00	2.41E 00	2.43E 00	4.10E 00	2.72E 00	2.31E 00

A* MATRIX BY ROWS

-3.50E 01	-3.89E 01	-3.81E 01	-6.19E 01	-4.09E 01	-4.10E 01
-5.03E 01	-5.32E 01	-5.38E 01	-8.68E 01	-5.74E 01	-5.72E 01
-5.79E 01	-6.23E 01	-6.02E 01	-9.93E 01	-6.55E 01	-6.59E 01
-4.63E 01	-5.00E 01	-4.98E 01	-7.89E 01	-5.30E 01	-5.29E 01
-4.76E 01	-5.15E 01	-5.12E 01	-8.21E 01	-5.31E 01	-5.47E 01
-2.99E 01	-3.24E 01	-3.22E 01	-5.18E 01	-3.43E 01	-3.32E 01

A INVERSE*A

-6.59E 01	-7.19E 01	-7.11E 01	-1.15E 02	-7.61E 01	-7.62E 01
-9.32E 01	-9.99E 01	-1.00E 02	-1.61E 02	-1.06E 02	-1.07E 02
-1.07E 02	-1.15E 02	-1.13E 02	-1.84E 02	-1.22E 02	-1.22E 02
-8.60E 01	-9.29E 01	-9.23E 01	-1.48E 02	-9.81E 01	-9.82E 01
-8.86E 01	-9.56E 01	-9.46E 01	-1.52E 02	-9.99E 01	-1.01E 02
-5.57E 01	-6.02E 01	-5.97E 01	-9.60E 01	-6.36E 01	-6.28E 01

C MATRIX BY ROWS

-6.69E 01	-7.19E 01	-7.11E 01	-1.15E 02	-7.61E 01	-7.62E 01
-9.32E 01	-1.01E 02	-1.00E 02	-1.61E 02	-1.06E 02	-1.07E 02
-1.07E 02	-1.15E 02	-1.14E 02	-1.84E 02	-1.22E 02	-1.22E 02
-8.60E 01	-9.29E 01	-9.23E 01	-1.49E 02	-9.81E 01	-9.82E 01
-8.86E 01	-9.56E 01	-9.46E 01	-1.52E 02	-1.01E 02	-1.01E 02
-5.57E 01	-6.02E 01	-5.97E 01	-9.60E 01	-6.36E 01	-6.38E 01

A* MATRIX BY ROWS

2.12E 04	2.29E 04	2.27E 04	3.66E 04	2.42E 04	2.43E 04
2.98E 04	3.21E 04	3.19E 04	5.13E 04	3.40E 04	3.40E 04
3.41E 04	3.68E 04	3.64E 04	5.87E 04	3.89E 04	3.89E 04
2.75E 04	2.96E 04	2.94E 04	4.73E 04	3.13E 04	3.14E 04
2.82E 04	3.05E 04	3.02E 04	4.86E 04	3.22E 04	3.22E 04
1.78E 04	1.92E 04	1.90E 04	3.06E 04	2.03E 04	2.03E 04

A INVERSE*A

3.95E 04	4.27E 04	4.23E 04	6.81E 04	4.50E 04	4.51E 04
5.54E 04	5.98E 04	5.92E 04	9.54E 04	6.31E 04	6.32E 04
6.33E 04	6.84E 04	6.78E 04	1.09E 05	7.22E 04	7.23E 04
5.11E 04	5.51E 04	5.46E 04	8.80E 04	5.82E 04	5.83E 04
5.25E 04	5.67E 04	5.61E 04	9.04E 04	5.98E 04	5.99E 04
3.31E 04	3.57E 04	3.54E 04	5.70E 04	3.77E 04	3.77E 04

C MATRIX BY ROWS

3.95E 04	4.27E 04	4.23E 04	6.81E 04	4.50E 04	4.51E 04
5.54E 04	5.98E 04	5.92E 04	9.54E 04	6.31E 04	6.32E 04
6.33E 04	6.84E 04	6.78E 04	1.09E 05	7.22E 04	7.23E 04
5.11E 04	5.51E 04	5.46E 04	8.80E 04	5.82E 04	5.83E 04
5.25E 04	5.67E 04	5.61E 04	9.04E 04	5.98E 04	5.99E 04
3.31E 04	3.57E 04	3.54E 04	5.70E 04	3.77E 04	3.77E 04

A* MATRIX BY ROWS

-7.49E 09	-8.09E 09	-8.01E 09	-1.29E 10	-8.54E 09	-8.55E 09
-1.05E 10	-1.13E 10	-1.12E 10	-1.81E 10	-1.20E 10	-1.20E 10
-1.20E 10	-1.30E 10	-1.29E 10	-2.07E 10	-1.37E 10	-1.37E 10
-9.68E 09	-1.05E 10	-1.04E 10	-1.67E 10	-1.10E 10	-1.11E 10
-9.95E 09	-1.07E 10	-1.06E 10	-1.71E 10	-1.13E 10	-1.14E 10
-6.27E 09	-6.77E 09	-6.70E 09	-1.08E 10	-7.15E 09	-7.16E 09

A INVERSE*A

-1.39E 10	-1.50E 10	-1.49E 10	-2.40E 10	-1.59E 10	-1.59E 10
-1.95E 10	-2.11E 10	-2.09E 10	-3.36E 10	-2.23E 10	-2.23E 10
-2.23E 10	-2.41E 10	-2.39E 10	-3.85E 10	-2.55E 10	-2.55E 10
-1.80E 10	-1.94E 10	-1.93E 10	-3.10E 10	-2.05E 10	-2.06E 10
-1.85E 10	-2.00E 10	-1.98E 10	-3.19E 10	-2.11E 10	-2.11E 10
-1.17E 10	-1.26E 10	-1.25E 10	-2.01E 10	-1.33E 10	-1.33E 10

A MATRIX BY ROWS

1.00E 00	2.90E-01	7.73E-02	2.54E-01	0	0
3.72E-01	1.00E 00	1.06E-02	3.21E-01	3.02E-01	0
2.67E-01	3.29E-01	1.00E 00	2.86E-01	2.52E-02	2.95E-01
1.00E-01	1.10E-01	1.50E-01	1.00E 00	2.73E-01	3.03E-01
0	8.43E-02	3.40E-01	2.89E-01	1.00E 00	1.26E-01
0	0	1.61E-01	2.15E-01	1.38E-01	1.00E 00

A* MATRIX BY ROWS

1.00E 00	-2.90E-01	0	0	0	0
-3.72E-01	1.00E 00	0	0	0	0
0	0	1.00E 00	-2.86E-01	0	0
0	0	-1.50E-01	1.00E 00	0	0
0	0	0	0	1.00E 00	-1.26E-01
0	0	0	0	-1.38E-01	1.00E 00

C MATRIX BY ROWS

-1.08E-01	0	3.91E-02	2.32E-01	0	0
0	-1.08E-01	-3.76E-02	3.17E-01	3.02E-01	-3.81E-02
1.44E-01	2.52E-01	-4.30E-02	0	-1.53E-02	2.92E-01
5.91E-02	8.07E-02	0	-4.30E-02	2.31E-01	2.69E-01
-3.14E-02	8.43E-02	2.96E-01	1.91E-01	-1.74E-02	0
0	0	1.29E-01	1.69E-01	0	-1.74E-02

A* MATRIX BY ROWS

1.11E 00	-3.22E-01	-5.00E-02	-1.40E-01	8.77E-02	-1.11E-02
-4.12E-01	1.11E 00	5.21E-02	-2.31E-01	-3.02E-01	3.81E-02
-1.27E-01	-2.28E-01	1.04E 00	-2.99E-01	8.15E-02	-2.15E-01
-3.75E-02	-4.29E-02	-1.57E-01	1.04E 00	-2.33E-01	-2.25E-01
3.14E-02	-8.43E-02	-2.80E-01	-1.70E-01	1.02E 00	-1.28E-01
-4.31E-03	1.16E-02	-8.81E-02	-1.43E-01	-1.40E-01	1.02E 00

A INVERSE*A

9.69E-01	-2.86E-02	5.91E-03	3.50E-02	-5.30E-02	-7.37E-02
-3.88E-03	9.47E-01	-9.03E-02	-3.35E-03	-3.60E-02	-7.91E-02
2.13E-02	3.93E-02	9.69E-01	-1.60E-01	-7.69E-02	2.72E-02
1.62E-02	-7.27E-03	-1.02E-01	8.69E-01	-1.04E-02	1.93E-02
-5.80E-02	-7.95E-02	2.23E-02	-7.94E-03	9.35E-01	-1.35E-01
-2.86E-02	-4.61E-02	7.78E-03	1.02E-02	-3.70E-02	9.17E-01

C MATRIX BY ROWS

-3.10E-02	-2.86E-02	5.91E-03	3.50E-02	-5.30E-02	-7.37E-02
-3.88E-03	-5.33E-02	-9.03E-02	-3.35E-03	-3.60E-02	-7.91E-02
2.13E-02	3.93E-02	-3.11E-02	-1.60E-01	-7.69E-02	2.72E-02
1.62E-02	-7.27E-03	-1.02E-01	-1.31E-01	-1.04E-02	1.93E-02
-5.80E-02	-7.95E-02	2.23E-02	-7.94E-03	-6.54E-02	-1.35E-01
-2.86E-02	-4.61E-02	7.78E-03	1.02E-02	-3.70E-02	-8.32E-02

A* MATRIX BY ROWS

1.07E 00	-3.44E-01	3.30E-03	-7.43E-02	4.06E-02	-8.22E-02
-3.90E-01	1.09E 00	-3.47E-02	-2.25E-01	-3.03E-01	1.53E-02
-1.04E-01	-1.66E-01	1.06E 00	-4.33E-01	2.20E-02	-1.58E-01
-2.64E-03	-2.44E-02	-2.62E-01	9.30E-01	-2.05E-01	-1.53E-01
-3.33E-02	-1.65E-01	-2.25E-01	-1.11E-01	9.80E-01	-2.61E-01
-2.94E-02	-2.71E-02	-6.71E-02	-9.85E-02	-1.60E-01	9.46E-01

A INVERSE*A

9.45E-01	-4.71E-02	8.70E-03	6.32E-02	-9.79E-02	-1.29E-01
-5.07E-03	8.99E-01	-1.74E-01	7.67E-03	-5.77E-02	-1.45E-01
4.23E-02	8.07E-02	9.50E-01	-2.92E-01	-1.48E-01	5.39E-02
2.77E-02	-1.78E-02	-1.88E-01	7.73E-01	-1.23E-02	3.25E-02
-1.06E-01	-1.41E-01	4.90E-02	-2.10E-02	8.83E-01	-2.38E-01
-5.12E-02	-8.18E-02	1.68E-02	1.64E-02	-6.61E-02	8.52E-01

C MATRIX BY ROWS

-5.51E-02	-4.71E-02	8.70E-03	6.32E-02	-9.79E-02	-1.29E-01
-5.07E-03	-1.01E-01	-1.74E-01	7.67E-03	-5.77E-02	-1.45E-01
4.23E-02	8.07E-02	-4.98E-02	-2.92E-01	-1.48E-01	5.39E-02
2.77E-02	-1.78E-02	-1.88E-01	-2.27E-01	-1.23E-02	3.25E-02
-1.06E-01	-1.41E-01	4.90E-02	-2.10E-02	-1.17E-01	-2.38E-01
-5.12E-02	-8.18E-02	1.68E-02	1.64E-02	-6.61E-02	-1.48E-01

A* MATRIX BY ROWS

1.13E 00	-3.31E-01	-8.02E-02	-1.53E-01	1.24E-01	5.06E-03
-4.30E-01	1.14E 00	1.29E-01	-2.76E-01	-3.21E-01	6.16E-02
-1.49E-01	-2.91E-01	1.01E 00	-2.10E-01	1.46E-01	-2.56E-01
-4.71E-02	-3.07E-02	-9.22E-02	1.06E 00	-2.68E-01	-2.44E-01
6.70E-02	-5.09E-02	-3.29E-01	-1.74E-01	1.03E 00	-7.90E-02
5.90E-03	2.73E-02	-1.01E-01	-1.57E-01	-1.32E-01	1.05E 00

A INVERSE*A

9.78E-01	-3.12E-02	1.15E-02	2.08E-02	-2.60E-02	-5.89E-02
-7.17E-03	9.84E-01	-1.95E-02	-4.68E-02	-4.84E-02	-4.13E-02
-3.05E-05	-7.49E-03	9.63E-01	-8.81E-02	-1.60E-02	1.96E-03
1.60E-02	1.16E-02	-5.52E-02	8.91E-01	-2.82E-02	2.04E-02
-3.27E-02	-5.95E-02	-1.53E-02	1.88E-02	9.59E-01	-9.92E-02
-1.90E-02	-3.32E-02	-4.15E-03	1.35E-02	-2.46E-02	9.42E-01

C MATRIX BY ROWS

-2.24E-02	-3.12E-02	1.15E-02	2.08E-02	-2.60E-02	-5.89E-02
-7.17E-03	-1.62E-02	-1.95E-02	-4.68E-02	-4.84E-02	-4.13E-02
-3.05E-05	-7.49E-03	-3.72E-02	-8.81E-02	-1.60E-02	1.96E-03
1.60E-02	1.16E-02	-5.52E-02	-1.09E-01	-2.82E-02	2.04E-02
-3.27E-02	-5.95E-02	-1.53E-02	1.88E-02	-4.10E-02	-9.92E-02
-1.90E-02	-3.32E-02	-4.15E-03	1.35E-02	-2.46E-02	-5.76E-02

A* MATRIX BY ROWS

1.10E 00	-3.69E-01	-5.13E-02	-8.78E-02	1.11E-01	-6.34E-02
-4.23E-01	1.14E 00	1.17E-01	-3.25E-01	-3.48E-01	6.29E-02
-1.47E-01	-2.92E-01	9.83E-01	-2.66E-01	1.55E-01	-2.38E-01
-1.54E-02	8.32E-03	-1.42E-01	9.48E-01	-2.77E-01	-1.78E-01
3.09E-02	-1.10E-01	-3.21E-01	-1.04E-01	1.00E 00	-1.83E-01
-1.25E-02	-1.22E-03	-9.17E-02	-1.21E-01	-1.48E-01	9.95E-01

A INVERSE*A

9.58E-01	-5.76E-02	2.25E-02	3.80E-02	-4.82E-02	-1.09E-01
-1.25E-02	9.72E-01	-3.45E-02	-8.77E-02	-9.11E-02	-7.54E-02
-9.31E-04	-1.47E-02	9.32E-01	-1.63E-01	-2.79E-02	3.84E-03
3.04E-02	2.26E-02	-1.02E-01	7.99E-01	-5.28E-02	3.86E-02
-6.06E-02	-1.11E-01	-2.93E-02	3.68E-02	9.26E-01	-1.84E-01
-3.52E-02	-6.16E-02	-7.85E-03	2.59E-02	-4.50E-02	8.93E-01

C MATRIX BY ROWS

-4.17E-02	-5.76E-02	2.25E-02	3.80E-02	-4.82E-02	-1.09E-01
-1.25E-02	-2.80E-02	-3.45E-02	-8.77E-02	-9.11E-02	-7.54E-02
-9.31E-04	-1.47E-02	-6.77E-02	-1.63E-01	-2.79E-02	3.84E-03
3.04E-02	2.26E-02	-1.02E-01	-2.01E-01	-5.28E-02	3.86E-02
-6.06E-02	-1.11E-01	-2.93E-02	3.68E-02	-7.44E-02	-1.84E-01
-3.52E-02	-6.16E-02	-7.85E-03	2.59E-02	-4.50E-02	-1.07E-01

A* MATRIX BY ROWS

1.14E 00	-3.07E-01	-9.83E-02	-1.90E-01	1.30E-01	4.52E-02
-4.36E-01	1.13E 00	1.31E-01	-2.44E-01	-3.01E-01	5.79E-02
-1.46E-01	-2.85E-01	1.02E 00	-1.79E-01	1.35E-01	-2.66E-01
-6.79E-02	-5.75E-02	-6.41E-02	1.13E 00	-2.60E-01	-2.85E-01
8.80E-02	-1.43E-02	-3.30E-01	-2.20E-01	1.04E 00	-1.78E-02
1.66E-02	4.43E-02	-1.07E-01	-1.80E-01	-1.24E-01	1.08E 00

A INVERSE*A

9.90E-01	-1.66E-02	2.09E-03	1.25E-02	-1.31E-02	-3.09E-02
-6.42E-03	9.85E-01	-1.52E-02	-1.99E-02	-1.89E-02	-2.48E-02
3.12E-03	-6.35E-04	9.77E-01	-4.43E-02	-1.38E-02	6.30E-04
5.72E-03	1.95E-03	-2.86E-02	9.45E-01	-1.21E-02	7.59E-03
-1.60E-02	-2.74E-02	-4.30E-03	2.72E-03	9.74E-01	-4.96E-02
-9.52E-03	-1.60E-02	-1.38E-03	4.29E-03	-1.43E-02	9.71E-01

C MATRIX BY ROWS

-1,03E-02	-1,66E-02	2,09E-03	1,25E-02	-1,31E-02	-3,09E-02
-6,42E-03	-1.48E-02	-1,52E-02	-1,99E-02	-1,89E-02	-2,48E-02
3,12E-03	-6,35E-04	-2,25E-02	-4,43E-02	-1,38E-02	6,30E-04
5,72E-03	1,95E-03	-2,86E-02	-5,54E-02	-1,21E-02	7,59E-03
-1,60E-02	-2,74E-02	-4,30E-03	2,72E-03	-2,57E-02	-4,96E-02
-9,52E-03	-1,60E-02	-1,38E-03	4,29E-03	-1,43E-02	-2,91E-02

A* MATRIX BY ROWS

1,13E 00	-3,26E-01	-8,42E-02	-1,55E-01	1,20E-01	8,15E-03
-4,35E-01	1,12E 00	1,18E-01	-2,64E-01	-3,08E-01	5,50E-02
-1,41E-01	-2,79E-01	1,00E 00	-2,11E-01	1,31E-01	-2,54E-01
-5,37E-02	-4,16E-02	-9,28E-02	1,07E 00	-2,60E-01	-2,52E-01
6,83E-02	-4,42E-02	-3,20E-01	-1,89E-01	1,02E 00	-7,33E-02
6,51E-03	2,92E-02	-1,01E-01	-1,62E-01	-1,34E-01	1,05E 00

A INVERSE*A

9,80E-01	-3,19E-02	4,11E-03	2,42E-02	-2,52E-02	-5,94E-02
-1,23E-02	9,72E-01	-2,92E-02	-3,81E-02	-3,62E-02	-4,74E-02
6,10E-03	-1,01E-03	9,57E-01	-8,51E-02	-2,64E-02	1,50E-03
1,11E-02	3,90E-03	-5,49E-02	8,94E-01	-2,31E-02	1,49E-02
-3,09E-02	-5,27E-02	-8,02E-03	5,54E-03	9,51E-01	-9,52E-02
-1,83E-02	-3,08E-02	-2,52E-03	8,44E-03	-2,75E-02	9,44E-01

C MATRIX BY ROWS

-1,99E-02	-3,19E-02	4,11E-03	2,42E-02	-2,52E-02	-5,94E-02
-1,23E-02	-2,83E-02	-2,92E-02	-3,81E-02	-3,62E-02	-4,74E-02
6,10E-03	-1,01E-03	-4,32E-02	-8,51E-02	-2,64E-02	1,50E-03
1,11E-02	3,90E-03	-5,49E-02	-1,06E-01	-2,31E-02	1,49E-02
-3,09E-02	-5,27E-02	-8,02E-03	5,54E-03	-4,93E-02	-9,52E-02
-1,83E-02	-3,08E-02	-2,52E-03	8,44E-03	-2,75E-02	-5,60E-02

A* MATRIX BY ROWS

1,16E 00	-2,92E-01	-1,10E-01	-2,19E-01	1,37E-01	7,43E-02
-4,36E-01	1,13E 00	1,41E-01	-2,28E-01	-2,95E-01	5,99E-02
-1,51E-01	-2,91E-01	1,03E 00	-1,54E-01	1,38E-01	-2,76E-01
-7,92E-02	-7,02E-02	-4,17E-02	1,18E 00	-2,60E-01	-3,11E-01
1,03E-01	8,89E-03	-3,38E-01	-2,45E-01	1,06E 00	2,54E-02
2,45E-02	5,61E-02	-1,11E-01	-1,95E-01	-1,16E-01	1,10E 00

A INVERSE*A

9,97E-01	-4,78E-03	3,04E-04	2,83E-03	-3,86E-03	-8,78E-03
-1,98E-03	9,96E-01	-4,54E-03	-6,72E-03	-6,07E-03	-7,56E-03
5,27E-04	-8,94E-04	9,93E-01	-1,28E-02	-4,25E-03	-7,89E-04
1,34E-03	6,39E-05	-8,30E-03	9,84E-01	-4,22E-03	1,14E-03
-4,54E-03	-8,04E-03	-2,09E-03	-2,76E-04	9,92E-01	-1,44E-02
-2,69E-03	-4,66E-03	-8,30E-04	5,80E-04	-4,33E-03	9,92E-01

C MATRIX BY ROWS

-2.95E-03	-4.78E-03	3.04E-04	2.83E-03	-3.86E-03	-8.78E-03
-1.98E-03	-4.44E-03	-4.54E-03	-6.72E-03	-6.07E-03	-7.56E-03
5.27E-04	-8.94E-04	-6.80E-03	-1.28E-02	-4.25E-03	-7.89E-04
1.34E-03	6.39E-05	-8.30E-03	-1.61E-02	-4.22E-03	1.14E-03
-4.54E-03	-8.04E-03	-2.09E-03	-2.76E-04	-7.81E-03	-1.44E-02
-2.69E-03	-4.66E-03	-8.30E-04	5.80E-04	-4.33E-03	-8.42E-03

A* MATRIX BY ROWS

1.15E 00	-2.97E-01	-1.06E-01	-2.09E-01	1.35E-01	6.35E-02
-4.36E-01	1.13E 00	1.37E-01	-2.35E-01	-2.98E-01	5.86E-02
-1.50E-01	-2.89E-01	1.02E 00	-1.63E-01	1.37E-01	-2.73E-01
-7.52E-02	-6.59E-02	-5.01E-02	1.16E 00	-2.61E-01	-3.02E-01
9.77E-02	1.78E-06	-3.36E-01	-2.36E-01	1.05E 00	8.90E-03
2.16E-02	5.16E-02	-1.10E-01	-1.90E-01	-1.19E-01	1.09E 00

A INVERSE*A

9.94E-01	-9.46E-03	6.19E-04	5.63E-03	-7.62E-03	-1.74E-02
-3.90E-03	9.91E-01	-8.95E-03	-1.32E-02	-1.20E-02	-1.49E-02
1.06E-03	-1.74E-03	9.87E-01	-2.53E-02	-8.39E-03	-1.52E-03
2.67E-03	1.56E-04	-1.64E-02	9.68E-01	-8.32E-03	2.31E-03
-8.98E-03	-1.59E-02	-4.10E-03	-4.86E-04	9.85E-01	-2.85E-02
-5.33E-03	-9.22E-03	-1.62E-03	1.18E-03	-8.56E-03	9.83E-01

C MATRIX BY ROWS

-5.83E-03	-9.46E-03	6.19E-04	5.63E-03	-7.62E-03	-1.74E-02
-3.90E-03	-8.77E-03	-8.95E-03	-1.32E-02	-1.20E-02	-1.49E-02
1.06E-03	-1.74E-03	-1.34E-02	-2.53E-02	-8.39E-03	-1.52E-03
2.67E-03	1.56E-04	-1.64E-02	-3.19E-02	-8.32E-03	2.31E-03
-8.98E-03	-1.59E-02	-4.10E-03	-4.86E-04	-1.54E-02	-2.85E-02
-5.33E-03	-9.22E-03	-1.62E-03	1.18E-03	-8.56E-03	-1.66E-02

A* MATRIX BY ROWS

1.16E 00	-2.87E-01	-1.13E-01	-2.28E-01	1.40E-01	8.43E-02
-4.36E-01	1.13E 00	1.44E-01	-2.22E-01	-2.93E-01	6.10E-02
-1.53E-01	-2.92E-01	1.03E 00	-1.45E-01	1.40E-01	-2.79E-01
-8.29E-02	-7.44E-02	-3.38E-02	1.20E 00	-2.59E-01	-3.20E-01
1.09E-01	1.72E-02	-3.40E-01	-2.53E-01	1.07E 00	4.08E-02
2.73E-02	6.02E-02	-1.13E-01	-1.99E-01	-1.14E-01	1.11E 00

A INVERSE*A

1.00E-00	-4.19E-04	-3.99E-05	1.19E-04	-3.72E-04	-7.61E-04
-1.99E-04	1.00E-00	-4.87E-04	-7.31E-04	-6.33E-04	-7.72E-04
-2.27E-06	-1.72E-04	9.99E-01	-1.18E-03	-4.78E-04	-2.34E-04
5.64E-05	-1.08E-04	-7.74E-04	9.99E-01	-4.89E-04	-1.01E-04
-3.99E-04	-7.39E-04	-3.09E-04	-2.53E-04	9.99E-01	-1.31E-03
-2.34E-04	-4.24E-04	-1.44E-04	-8.00E-05	-4.29E-04	9.99E-01

C MATRIX BY ROWS

-2.48E-04	-4.19E-04	-3.99E-05	1.19E-04	-3.72E-04	-7.61E-04
-1.99E-04	-4.55E-04	-4.87E-04	-7.31E-04	-6.33E-04	-7.72E-04
-2.27E-06	-1.72E-04	-6.48E-04	-1.18E-03	-4.78E-04	-2.34E-04
5.64E-05	-1.08E-04	-7.74E-04	-1.45E-03	-4.89E-04	-1.01E-04
-3.99E-04	-7.39E-04	-3.09E-04	-2.53E-04	-7.79E-04	-1.31E-03
-2.34E-04	-4.24E-04	-1.44E-04	-8.00E-05	-4.29E-04	-7.56E-04

A* MATRIX BY ROWS

1.16E 00	-2.87E-01	-1.13E-01	-2.28E-01	1.40E-01	8.35E-02
-4.36E-01	1.13E 00	1.44E-01	-2.22E-01	-2.93E-01	6.08E-02
-1.53E-01	-2.92E-01	1.03E 00	-1.46E-01	1.39E-01	-2.78E-01
-8.27E-02	-7.41E-02	-3.46E-02	1.20E 00	-2.60E-01	-3.19E-01
1.08E-01	1.64E-02	-3.40E-01	-2.52E-01	1.07E 00	3.94E-02
2.70E-02	5.99E-02	-1.13E-01	-1.99E-01	-1.14E-01	1.11E 00

A INVERSE*A

1.00E-00	-8.37E-04	-7.94E-05	2.39E-04	-7.43E-04	-1.52E-03
-3.98E-04	9.99E-01	-9.73E-04	-1.46E-03	-1.26E-03	-1.54E-03
-4.33E-06	-3.43E-04	9.99E-01	-2.35E-03	-9.55E-04	-4.67E-04
1.13E-04	-2.15E-04	-1.55E-03	9.97E-01	-9.77E-04	-2.01E-04
-7.97E-04	-1.48E-03	-6.18E-04	-5.04E-04	9.98E-01	-2.62E-03
-4.67E-04	-8.46E-04	-2.87E-04	-1.59E-04	-8.57E-04	9.98E-01

C MATRIX BY ROWS

-4.95E-04	-8.37E-04	-7.94E-05	2.39E-04	-7.43E-04	-1.52E-03
-3.98E-04	-9.09E-04	-9.73E-04	-1.46E-03	-1.26E-03	-1.54E-03
-4.33E-06	-3.43E-04	-1.30E-03	-2.35E-03	-9.55E-04	-4.67E-04
1.13E-04	-2.15E-04	-1.55E-03	-2.90E-03	-9.77E-04	-2.01E-04
-7.97E-04	-1.48E-03	-6.18E-04	-5.04E-04	-1.56E-03	-2.62E-03
-4.67E-04	-8.46E-04	-2.87E-04	-1.59E-04	-8.57E-04	-1.51E-03

A* MATRIX BY ROWS

1.16E 00	-2.86E-01	-1.13E-01	-2.29E-01	1.40E-01	8.52E-02
-4.36E-01	1.13E 00	1.44E-01	-2.21E-01	-2.93E-01	6.12E-02
-1.53E-01	-2.92E-01	1.03E 00	-1.44E-01	1.40E-01	-2.79E-01
-8.32E-02	-7.46E-02	-3.31E-02	1.20E 00	-2.59E-01	-3.21E-01
1.09E-01	1.80E-02	-3.40E-01	-2.53E-01	1.07E 00	4.22E-02
2.75E-02	6.06E-02	-1.13E-01	-2.00E-01	-1.13E-01	1.11E 00

A INVERSE*A

1.00E-00	-3.54E-06	-1.48E-06	-1.21E-06	-3.73E-06	-6.28E-06
-2.13E-06	1.00E-00	-5.66E-06	-8.63E-06	-7.09E-06	-8.40E-06
0	-3.07E-06	1.00E-00	-1.09E-05	-5.85E-06	-4.82E-06
0	-2.87E-06	-7.35E-06	1.00E-00	-6.19E-06	-4.33E-06
-3.39E-06	-6.85E-06	-4.79E-06	-6.08E-06	1.00E-00	-1.19E-05
-1.94E-06	-3.84E-06	-2.44E-06	-2.93E-06	-4.48E-06	1.00E-00

C MATRIX BY ROWS

-1.91E-06	-3.54E-06	-1.48E-06	-1.21E-06	-3.73E-06	-6.28E-06
-2.13E-06	-4.98E-06	-5.66E-06	-8.63E-06	-7.09E-06	-8.40E-06
0	-3.07E-06	-6.37E-06	-1.09E-05	-5.85E-06	-4.82E-06
0	-2.87E-06	-7.35E-06	-1.29E-05	-6.19E-06	-4.33E-06
-3.39E-06	-6.85E-06	-4.79E-06	-6.08E-06	-8.21E-06	-1.19E-05
-1.94E-06	-3.84E-06	-2.44E-06	-2.93E-06	-4.48E-06	-6.71E-06

A* MATRIX BY ROWS

1.16E 00	-2.86E-01	-1.13E-01	-2.29E-01	1.40E-01	8.52E-02
-4.36E-01	1.13E 00	1.44E-01	-2.21E-01	-2.93E-01	6.12E-02
-1.53E-01	-2.92E-01	1.03E 00	-1.44E-01	1.40E-01	-2.79E-01
-8.32E-02	-7.46E-02	-3.31E-02	1.20E 00	-2.59E-01	-3.21E-01
1.09E-01	1.80E-02	-3.40E-01	-2.53E-01	1.07E 00	4.22E-02
2.75E-02	6.06E-02	-1.13E-01	-2.00E-01	-1.13E-01	1.11E 00

A INVERSE*A

1.00E-00	-7.07E-06	-2.96E-06	-2.43E-06	-7.45E-06	-1.26E-05
-4.25E-06	1.00E-00	-1.13E-05	-1.73E-05	-1.42E-05	-1.68E-05
0	-6.14E-06	1.00E-00	-2.18E-05	-1.17E-05	-9.65E-06
0	-5.74E-06	-1.47E-05	1.00E-00	-1.24E-05	-8.66E-06
-6.79E-06	-1.37E-05	-9.59E-06	-1.22E-05	1.00E-00	-2.38E-05
-3.88E-06	-7.68E-06	-4.88E-06	-5.86E-06	-8.95E-06	1.00E-00

C MATRIX BY ROWS

-3.82E-06	-7.07E-06	-2.96E-06	-2.43E-06	-7.45E-06	-1.26E-05
-4.25E-06	-9.96E-06	-1.13E-05	-1.73E-05	-1.42E-05	-1.68E-05
0	-6.14E-06	-1.27E-05	-2.18E-05	-1.17E-05	-9.65E-06
0	-5.74E-06	-1.47E-05	-2.58E-05	-1.24E-05	-8.66E-06
-6.79E-06	-1.37E-05	-9.59E-06	-1.22E-05	-1.64E-05	-2.38E-05
-3.88E-06	-7.68E-06	-4.88E-06	-5.86E-06	-8.95E-06	-1.34E-05

A* MATRIX BY ROWS

1.16E 00	-2.86E-01	-1.13E-01	-2.29E-01	1.40E-01	8.52E-02
-4.36E-01	1.13E 00	1.44E-01	-2.21E-01	-2.93E-01	6.12E-02
-1.53E-01	-2.92E-01	1.03E 00	-1.44E-01	1.40E-01	-2.79E-01
-8.32E-02	-7.46E-02	-3.31E-02	1.20E 00	-2.59E-01	-3.21E-01
1.09E-01	1.80E-02	-3.40E-01	-2.53E-01	1.07E 00	4.23E-02
2.75E-02	6.06E-02	-1.13E-01	-2.00E-01	-1.13E-01	1.11E 00

A INVERSE*A

1.00E-00	0	0	0	0	0
0	1.00E-00	0	0	0	0
0	0	1.00E-00	0	0	0
0	0	0	1.00E-00	0	0
0	0	0	0	1.00E-00	0
0	0	0	0	0	1.00E-00

A MATRIX BY ROWS

1.00E 00	3.04E-01	1.32E-01	2.44E-01	8.68E-02	0	0	0
3.48E-01	1.00E 00	1.04E-01	3.66E-01	3.95E-01	7.67E-02	0	0
2.58E-01	1.03E-01	1.00E 00	1.34E-01	8.56E-02	2.07E-02	2.98E-01	3.98E-01
2.36E-01	7.64E-02	6.63E-02	1.00E 00	1.26E-01	1.90E-03	3.80E-02	2.42E-01
2.73E-01	1.55E-01	1.14E-01	3.75E-02	1.00E 00	1.48E-01	5.28E-02	3.90E-01
0	3.83E-01	1.21E-01	1.98E-01	1.84E-01	1.00E 00	3.28E-01	4.06E-01
0	0	2.38E-01	3.85E-01	2.30E-01	2.85E-01	1.00E 00	2.91E-01
0	0	0	1.13E-01	3.56E-02	2.38E-01	1.14E-01	1.00E 00

A* MATRIX BY ROWS

1.00E 00	-3.04E-01	0	0	0	0	0	0
-3.48E-01	1.00E 00	0	0	0	0	0	0
0	0	1.00E 00	-1.34E-01	0	0	0	0
0	0	-6.63E-02	1.00E 00	0	0	0	0
0	0	0	0	1.00E 00	-1.48E-01	0	0
0	0	0	0	-1.84E-01	1.00E 00	0	0
0	0	0	0	0	0	1.00E 00	-2.91E-01
0	0	0	0	0	0	-1.14E-01	1.00E 00

C MATRIX BY ROWS

-1,06E-01	0	1,16E-01	2,26E-01	8,68E-02	-1,29E-02	0	0
0	-1,06E-01	7,93E-02	3,53E-01	3.81E-01	1,80E-02	0	0
2,22E-01	2,46E-02	-8,86E-03	0	8,18E-02	8,01E-03	2,52E-01	3,12E-01
2,09E-01	4,60E-03	0	-8,86E-03	1,26E-01	-1,68E-02	1,05E-02	2,31E-01
2,19E-01	7,18E-02	1.12E-01	2,22E-02	-2,73E-02	0	8,37E-03	3,74E-01
-1,33E-01	3,83E-01	1,08E-01	1,82E-01	0	-2,73E-02	2,82E-01	3,10E-01
0	0	2,12E-01	3,53E-01	1,77E-01	2,51E-01	-3,31E-02	0
0	0	-7,47E-03	1,13E-01	-8,27E-03	2,33E-01	0	-3,31E-02

A* MATRIX BY ROWS

1,11E 00	-3,37E-01	-9,16E-02	-1,19E-01	2,93E-02	1,84E-02	0	0
-3,85E-01	1,11E 00	-3,90E-02	-2,74E-01	-3,51E-01	-2,25E-02	0	0
-1,94E-01	-2,40E-02	1,01E 00	-1,35E-01	-6,49E-02	-1,03E-02	-2,51E-01	-2,81E-01
-1,94E-01	-2,97E-03	-6,69E-02	1,01E 00	-1,21E-01	1,74E-02	6,26E-03	-2,10E-01
-2,39E-01	-1,50E-02	-9,60E-02	4,77E-03	1.03E 00	-1.52E-01	3,34E-02	-3,28E-01
1,74E-01	-3,70E-01	-8,75E-02	-1,78E-01	-1,89E-01	1,03E 00	-2,80E-01	-2,41E-01
0	0	-2,14E-01	-3,20E-01	-1,80E-01	-1,84E-01	1,03E 00	-3,00E-01
0	0	3,17E-02	-7,25E-02	2.85E-02	-2,04E-01	-1,18E-01	1,03E 00

A INVERSE*A

8,95E-01	-5,19E-03	4,95E-03	2,64E-02	-2,64E-02	1,17E-03	-2,86E-02	-1,17E-01
-1,73E-01	9,51E-01	-3.56E-02	2,87E-02	-1,28E-04	7,71E-03	-3,20E-02	-2,54E-01
8,64E-03	-6,12E-03	9,11E-01	-1,86E-01	-6,79E-02	-1,33E-01	7,65E-03	-2,00E-02
-5,89E-03	-2,07E-03	-3,74E-02	9,22E-01	-1,53E-02	-5,44E-02	4,13E-03	-3,23E-02
-3,09E-04	6,72E-03	-2,60E-02	-1,19E-01	9,42E-01	-8,84E-02	-2,80E-02	-1,74E-02
-7,98E-02	4,76E-02	-6,85E-02	-2,33E-01	-2,14E-01	8,50E-01	-1,21E-02	-5,69E-02
-1,26E-01	-1,16E-01	-3,81E-02	-3,48E-02	-5,11E-02	1,94E-02	8,69E-01	-2,92E-01
1,10E-02	-8,91E-02	-2,46E-02	-3,75E-02	-1,41E-02	1,60E-02	-6,50E-02	9,06E-01

C MATRIX BY ROWS

-1,05E-01	-5,19E-03	4,95E-03	2,64E-02	-2,64E-02	1,17E-03	-2,86E-02	-1,17E-01
-1,73E-01	-4,91E-02	-3,56E-02	2,87E-02	-1,28E-04	7,71E-03	-3,20E-02	-2,54E-01
8,64E-03	-6,12E-03	-8,89E-02	-1,86E-01	-6,79E-02	-1,33E-01	7,65E-03	-2,00E-02
-5,89E-03	-2,07E-03	-3,74E-02	-7,85E-02	-1,53E-02	-5,44E-02	4,13E-03	-3,23E-02
-3,09E-04	6,72E-03	-2,60E-02	-1,19E-01	-5,75E-02	-8,84E-02	-2,80E-02	-1,74E-02
-7,98E-02	4,76E-02	-6,85E-02	-2,33E-01	-2,14E-01	-1,50E-01	-1,21E-02	-5,69E-02
-1,26E-01	-1,16E-01	-3,81E-02	-3,48E-02	-5,11E-02	1,94E-02	-1,31E-01	-2,92E-01
1,10E-02	-8,91E-02	-2,46E-02	-3,75E-02	-1,41E-02	1,60E-02	-6,50E-02	-9,40E-02

A* MATRIX BY ROWS

1,05E 00	-3,24E-01	-6,36E-02	-8,08E-02	2,56E-03	3,04E-02	-2,32E-02	-3,94E-02
-5,32E-01	1,05E 00	-5,59E-02	-1,76E-01	-3,09E-01	4,01E-02	-1,57E-02	-2,19E-01
-1,31E-01	2,55E-02	9,43E-01	-2,89E-01	-1,04E-01	-1,40E-01	-1,84E-01	-1,67E-01
-1,84E-01	1,45E-02	-9,26E-02	9,55E-01	-1,21E-01	-2,40E-02	3,16E-02	-1,99E-01
-2,08E-01	1,26E-02	-9,78E-02	-6,05E-02	1,02E 00	-2,13E-01	3,01E-02	-2,83E-01
1,70E-01	-2,50E-01	-1,08E-01	-3,51E-01	-3,76E-01	8,99E-01	-2,30E-01	-1,11E-01
-1,19E-01	-1,01E-01	-1,98E-01	-2,16E-01	-1,59E-01	-7,89E-02	9,22E-01	-5,45E-01
4,32E-02	-8,79E-02	2,39E-02	-6,31E-02	6,10E-02	-1,62E-01	-1,68E-01	9,83E-01

A INVERSE*A

8,04E-01	3,94E-03	1,27E-02	5,51E-02	-4,65E-02	-1,87E-04	-4,19E-02	-2,01E-01
-3,19E-01	9,32E-01	-6,12E-02	6,47E-02	9,87E-03	1,22E-02	-3,70E-02	-4,44E-01
2,72E-02	-1,70E-02	8,48E-01	-3,02E-01	-9,48E-02	-2,19E-01	1,76E-02	-2,32E-02
-7,19E-03	-3,92E-03	-6,37E-02	8,72E-01	-1,40E-02	-9,04E-02	1,05E-02	-5,49E-02
9,15E-03	1,37E-02	-3,65E-02	-1,95E-01	9,12E-01	-1,49E-01	-4,94E-02	-1,64E-02
-1,46E-01	9,20E-02	-1,07E-01	-3,72E-01	-3,71E-01	7,62E-01	-1,19E-02	-8,65E-02
-2,08E-01	-1,83E-01	-5,59E-02	-4,94E-02	-8,62E-02	3,92E-02	7,83E-01	-4,73E-01
4,21E-02	-1,57E-01	-3,83E-02	-6,59E-02	-2,42E-02	3,28E-02	-1,13E-01	8,62E-01

C MATRIX BY ROWS

-1,96E-01	3,94E-03	1,27E-02	5,51E-02	-4,65E-02	-1,87E-04	-4,19E-02	-2,01E-01
-3,19E-01	-6,80E-02	-6,12E-02	6,47E-02	9,87E-03	1,22E-02	-3,70E-02	-4,44E-01
2,72E-02	-1,70E-02	-1,52E-01	-3,02E-01	-9,48E-02	-2,19E-01	1,76E-02	-2,32E-02
-7,19E-03	-3,92E-03	-6,37E-02	-1,28E-01	-1,40E-02	-9,04E-02	1,05E-02	-5,49E-02
9,15E-03	1,37E-02	-3.65E-02	-1,95E-01	-8,76E-02	-1,49E-01	-4,94E-02	-1,64E-02
-1,46E-01	9,20E-02	-1,07E-01	-3,72E-01	-3,71E-01	-2,38E-01	-1,19E-02	-8,65E-02
-2,08E-01	-1,83E-01	-5,59E-02	-4,94E-02	-8,62E-02	3,92E-02	-2,17E-01	-4,73E-01
4,21E-02	-1,57E-01	-3,83E-02	-6,59E-02	-2,42E-02	3,28E-02	-1,13E-01	-1,38E-01

A* MATRIX BY ROWS

1,15E 00	-3,65E-01	-1,11E-01	-1,39E-01	5,58E-02	2,31E-02	1,71E-03	7,80E-03
-2,87E-01	1,09E 00	-2,08E-02	-3,15E-01	-3,71E-01	-2,98E-02	-3,93E-02	8,95E-02
-2,27E-01	-3,08E-03	1,04E 00	-1,28E-01	-1,05E-01	3,87E-03	-2,68E-01	-3,00E-01
-1,94E-01	-3,17E-03	-5,54E-02	1,01E 00	-1,46E-01	2,34E-02	-5,87E-03	-1,96E-01
-2,65E-01	-2,10E-02	-1,08E-01	1,50E-02	1,00E 00	-1,31E-01	4,65E-02	-3,51E-01
2,16E-01	-4,08E-01	-9,91E-02	-1,80E-01	-1,02E-01	1,02E 00	-2,97E-01	-2,61E-01
3,38E-02	-1,87E-02	-2,30E-01	-3,41E-01	-1,63E-01	-2.01E-01	1,05E 00	-2,80E-01
-7,79E-02	4,37E-02	3,08E-02	-5,26E-02	1,97E-02	-2,17E-01	-9,34E-02	9,93E-01

A INVERSE*A

9,63E-01	-3,72E-02	-3,59E-03	-3,00E-03	-1,98E-02	8,95E-03	-4,30E-02	-8,27E-02
-6,93E-02	9,18E-01	-2,27E-02	-1,28E-02	-2,76E-02	1,36E-02	-7,30E-02	-1,70E-01
-2,45E-02	1,60E-02	9,30E-01	-1,86E-01	-1,06E-01	-1.27E-01	2,84E-04	-3,75E-02
-1,04E-02	3,59E-06	-2,96E-02	9,25E-01	-4,34E-02	-4,78E-02	-3,64E-03	-2,23E-02
-2,48E-02	2,81E-03	-3,97E-02	-1,14E-01	9,26E-01	-7,20E-02	-1,51E-02	-4,36E-02
-2,92E-02	1,48E-02	-7,53E-02	-2.46E-01	-1.47E-01	8.33E-01	-3,04E-02	-5,56E-02
-1,17E-01	-1,29E-01	-4,94E-02	-4,40E-02	-3,70E-02	5,96E-03	8,82E-01	-2,93E-01
-5,39E-02	-5,68E-02	-2,91E-02	-1,94E-02	-4,06E-03	7.17E-04	-4,36E-02	8,64E-01

C MATRIX BY ROWS

-3,70E-02	-3,72E-02	-3,59E-03	-3,00E-03	-1,98E-02	8,95E-03	-4,30E-02	-8,27E-02
-6,93E-02	-8,18E-02	-2,27E-02	-1,28E-02	-2.76E-02	1.36E-02	-7,30E-02	-1,70E-01
-2,45E-02	1,60E-02	-7,03E-02	-1,86E-01	-1.06E-01	-1.27E-01	2,84E-04	-3,75E-02
-1,04E-02	3,59E-06	-2,96E-02	-7,46E-02	-4,34E-02	-4,78E-02	-3,64E-03	-2,23E-02
-2,48E-02	2,81E-03	-3,97E-02	-1,14E-01	-7,36E-02	-7,20E-02	-1,51E-02	-4,36E-02
-2,92E-02	1,48E-02	-7,53E-02	-2,46E-01	-1,47E-01	-1.67E-01	-3.04E-02	-5,56E-02
-1,17E-01	-1,29E-01	-4,94E-02	-4,40E-02	-3,70E-02	5,96E-03	-1,18E-01	-2,93E-01
-5,39E-02	-5,68E-02	-2,91E-02	-1,94E-02	-4,06E-03	7,17E-04	-4.36E-02	-1,36E-01

A* MATRIX BY ROWS

1,13E 00	-3,80E-01	-9,92E-02	-1,19E-01	5,32E-02	4,13E-02	-2,27E-02	-2,35E-02
-3,38E-01	1,01E 00	-1,73E-02	-2,51E-01	-3,47E-01	3,16E-02	-9,78E-02	-4,59E-02
-1,92E-01	7,36E-02	9,93E-01	-2,81E-01	-1,87E-01	-1,18E-01	-2,11E-01	-1,93E-01
-1,82E-01	1,52E-02	-7,08E-02	9,65E-01	-1,72E-01	-1,34E-02	9,69E-03	-1,66E-01
-2,59E-01	3,72E-03	-1,21E-01	-4,21E-02	9,64E-01	-1,71E-01	5,80E-02	-3,25E-01
2,62E-01	-3,16E-01	-1,29E-01	-3,63E-01	-2,07E-01	8,70E-01	-2,58E-01	-1,32E-01
-5,46E-02	-1,45E-01	-2,25E-01	-2,46E-01	-1,20E-01	-1,04E-01	9,47E-01	-5,14E-01
-1,15E-01	-3,94E-03	2,07E-02	-1,88E-02	4.89E-02	-1.83E-01	-1,19E-01	8,96E-01

A INVERSE*A

9,40E-01	-5,96E-02	-1,22E-03	-9,75E-04	-3,53E-02	1,73E-02	-7.30E-02	-1,32E-01
-1,12E-01	8,64E-01	-3,26E-02	-1,29E-02	-4,51E-02	2,81E-02	-1,21E-01	-2,73E-01
-3,73E-02	3,04E-02	8,84E-01	-3,01E-01	-1,70E-01	-2,07E-01	8,16E-03	-5,23E-02
-1,48E-02	8,28E-04	-4.88E-02	8,79E-01	-6,97E-02	-7,73E-02	-3,07E-03	-3,24E-02
-3,86E-02	8,82E-03	-6,29E-02	-1,84E-01	8,79E-01	-1,16E-01	-2,19E-02	-6,40E-02
-3,89E-02	3,25E-02	-1,17E-01	-3,99E-01	-2,39E-01	7,25E-01	-4,65E-02	-7,09E-02
-1,88E-01	-2,12E-01	-7,53E-02	-5,99E-02	-5,36E-02	1,82E-02	8,05E-01	-4,76E-01
-8,85E-02	-9,41E-02	-4,80E-02	-2,62E-02	7,98E-04	4,61E-03	-6,95E-02	7,76E-01

C MATRIX BY ROWS

-6,02E-02	-5,96E-02	-1,22E-03	-9,75E-04	-3,53E-02	1,73E-02	-7,30E-02	-1,32E-01
-1,12E-01	-1,36E-01	-3,26E-02	-1,29E-02	-4,51E-02	2,81E-02	-1,21E-01	-2,73E-01
-3,73E-02	3,04E-02	-1.16E-01	-3,01E-01	-1,70E-01	-2,07E-01	8,16E-03	-5,23E-02
-1,48E-02	8,28E-04	-4,88E-02	-1,21E-01	-6,97E-02	-7,73E-02	-3,07E-03	-3,24E-02
-3,86E-02	8,82E-03	-6,29E-02	-1,84E-01	-1,21E-01	-1.16E-01	-2,19E-02	-6,40E-02
-3,89E-02	3,25E-02	-1,17E-01	-3,99E-01	-2,39E-01	-2,75E-01	-4,65E-02	-7,09E-02
-1,88E-01	-2,12E-01	-7,53E-02	-5,99E-02	-5,36E-02	1,82E-02	-1,95E-01	-4,76E-01
-8,85E-02	-9,41E-02	-4,80E-02	-2,62E-02	7,98E-04	4,61E-03	-6,95E-02	-2,24E-01

A* MATRIX BY ROWS

1,15E 00	-3,69E-01	-1,22E-01	-1,43E-01	6,61E-02	2,07E-02	1,16E-02	3,25E-03
-2,85E-01	1,10E 00	-2,68E-02	-3,33E-01	-3,73E-01	-4,35E-02	-2,98E-02	9,90E-02
-2,31E-01	-1,54E-02	1,05E 00	-1,15E-01	-1,03E-01	1,73E-02	-2,89E-01	-3,19E-01
-1,99E-01	-3,82E-03	-5,13E-02	1,02E 00	-1,46E-01	2,61E-02	-1,22E-02	-2,03E-01
-2,66E-01	-2,87E-02	-1,08E-01	2,03E-02	1,01E 00	-1,29E-01	4,23E-02	-3,61E-01
1,98E-01	-4,33E-01	-1,08E-01	-1,60E-01	-9,03E-02	1,04E 00	-3,01E-01	-3,07E-01
3,80E-02	-3,87E-03	-2,41E-01	-3,65E-01	-1,72E-01	-2,23E-01	1,07E 00	-2,61E-01
-7,03E-02	5,26E-02	3.76E-02	-6,28E-02	1,94E-03	-2,25E-01	-9,64E-02	1,01E 00

A INVERSE*A

9,64E-01	-3,98E-02	-1,42E-02	-8,73E-03	-9,03E-03	4,97E-03	-3,49E-02	-8,96E-02
-7,09E-02	9,24E-01	-3,07E-02	-2,47E-02	-2,15E-02	3,92E-03	-6,66E-02	-1,74E-01
-2,53E-02	1,07E-02	9,36E-01	-1,85E-01	-1,10E-01	-1,24E-01	-1,44E-02	-4,57E-02
-1,35E-02	2,40E-04	-2,67E-02	9,26E-01	-4,42E-02	-4,83E-02	-8,92E-03	-2,69E-02
-2,54E-02	-4,86E-03	-4,19E-02	-1,13E-01	9,32E-01	-7,22E-02	-1,86E-02	-5,27E-02
-4,39E-02	4,64E-04	-8,59E-02	-2,41E-01	-1,44E-01	8,43E-01	-3,12E-02	-8,80E-02
-1,19E-01	-1,24E-01	-5,75E-02	-5,95E-02	-4,54E-02	-6,45E-03	8,90E-01	-2,90E-01
-5,07E-02	-5,26E-02	-2,54E-02	-2,69E-02	-1,97E-02	-4,10E-03	-4,64E-02	8,76E-01

C MATRIX BY ROWS

-3,64E-02	-3,98E-02	-1,42E-02	-8,73E-03	-9,03E-03	4,97E-03	-3,49E-02	-8,96E-02
-7,09E-02	-7,60E-02	-3,07E-02	-2,47E-02	-2,15E-02	3,92E-03	-6,66E-02	-1,74E-01
-2,53E-02	1,07E-02	-6,38E-02	-1,85E-01	-1,10E-01	-1,24E-01	-1,44E-02	-4,57E-02
-1,35E-02	2,40E-04	-2,67E-02	-7,39E-02	-4,42E-02	-4,83E-02	-8,92E-03	-2,69E-02
-2,54E-02	-4,86E-03	-4,19E-02	-1,13E-01	-6,80E-02	-7,22E-02	-1,86E-02	-5,27E-02
-4,39E-02	4,64E-04	-8,59E-02	-2,41E-01	-1,44E-01	-1,57E-01	-3,12E-02	-8,80E-02
-1,19E-01	-1,24E-01	-5,75E-02	-5,95E-02	-4,54E-02	-6,45E-03	-1,10E-01	-2,90E-01
-5,07E-02	-5,26E-02	-2,54E-02	-2,69E-02	-1,97E-02	-4,10E-03	-4,64E-02	-1,24E-01

A* MATRIX BY ROWS

1,14E 00	-3,90E-01	-1,21E-01	-1,24E-01	7,53E-02	3,89E-02	-4,34E-03	-3,55E-02
-3,37E-01	1,03E 00	-2,74E-02	-2,76E-01	-3,46E-01	1,23E-02	-8,28E-02	-3,65E-02
-1,94E-01	5,93E-02	1,01E 00	-2,64E-01	-1,87E-01	-9,98E-02	-2,46E-01	-2,13E-01
-1,90E-01	1,70E-02	-6,25E-02	9,72E-01	-1,73E-01	-1,05E-02	-7,10E-04	-1,76E-01
-2,59E-01	-8,28E-03	-1,22E-01	-3,38E-02	9,80E-01	-1,69E-01	5,22E-02	-3,37E-01
2,34E-01	-3,55E-01	-1,47E-01	-3,33E-01	-1,88E-01	9,07E-01	-2,60E-01	-2,01E-01
-5,17E-02	-1,26E-01	-2,45E-01	-2,77E-01	-1,29E-01	-1,33E-01	9,77E-01	-4,92E-01
-1,02E-01	1,03E-02	3,53E-02	-3,34E-02	1,69E-02	-1,95E-01	-1,27E-01	9,34E-01

A INVERSE*A

9,40E-01	-6,61E-02	-2,13E-02	-8,56E-03	-1,17E-02	1,22E-02	-5,76E-02	-1,47E-01
-1,16E-01	8,74E-01	-4,67E-02	-2,93E-02	-2,89E-02	1,43E-02	-1,09E-01	-2,84E-01
-3,40E-02	2,55E-02	8,99E-01	-3,01E-01	-1,78E-01	-2,03E-01	-1,64E-02	-5,66E-02
-1,93E-02	3,41E-03	-4,24E-02	8,81E-01	-7,12E-02	-7,89E-02	-1,18E-02	-3,68E-02
-3,71E-02	-3,45E-03	-6,62E-02	-1,81E-01	8,91E-01	-1,17E-01	-2,63E-02	-7,55E-02
-6,20E-02	1,08E-02	-1,36E-01	-3,89E-01	-2,33E-01	7,43E-01	-4,23E-02	-1,20E-01
-1,93E-01	-2,05E-01	-8,81E-02	-7,88E-02	-6,33E-02	2,20E-03	8,20E-01	-4,73E-01
-8,24E-02	-8,71E-02	-3,91E-02	-3,61E-02	-2,73E-02	-1,34E-03	-7,56E-02	7,98E-01

C MATRIX BY ROWS

-5,95E-02	-6,61E-02	-2,13E-02	-8,56E-03	-1,17E-02	1,22E-02	-5,76E-02	-1,47E-01
-1,16E-01	-1,26E-01	-4,67E-02	-2,93E-02	-2,89E-02	1,43E-02	-1,09E-01	-2,84E-01
-3,40E-02	2,55E-02	-1,01E-01	-3,01E-01	-1,78E-01	-2,03E-01	-1,64E-02	-5,66E-02
-1,93E-02	3,41E-03	-4,24E-02	-1,19E-01	-7,12E-02	-7,89E-02	-1,18E-02	-3,68E-02
-3,71E-02	-3,45E-03	-6,62E-02	-1,81E-01	-1,09E-01	-1,17E-01	-2,63E-02	-7,55E-02
-6,20E-02	1,08E-02	-1,36E-01	-3,89E-01	-2,33E-01	-2,57E-01	-4,23E-02	-1,20E-01
-1,93E-01	-2,05E-01	-8,81E-02	-7,88E-02	-6,33E-02	2,20E-03	-1,80E-01	-4,73E-01
-8,24E-02	-8,71E-02	-3,91E-02	-3,61E-02	-2,73E-02	-1,34E-03	-7,56E-02	-2,02E-01

A* MATRIX BY ROWS

1,16E 00	-3,65E-01	-1,24E-01	-1,49E-01	6,30E-02	1,50E-02	1,53E-02	1,04E-02
-2,76E-01	1,12E 00	-3,09E-02	-3,56E-01	-3,85E-01	-6,27E-02	-1,99E-02	1,23E-01
-2,48E-01	-3,96E-02	1,05E 00	-9,12E-02	-9,10E-02	3,94E-02	-3,07E-01	-3,63E-01
-2,04E-01	-1,10E-02	-5,07E-02	1,03E 00	-1,43E-01	3,24E-02	-1,78E-02	-2,16E-01
-2,72E-01	-3,67E-02	-1,08E-01	2,69E-02	1,01E 00	-1,23E-01	3,66E-02	-3,76E-01
1,78E-01	-4,61E-01	-1,08E-01	-1,34E-01	-7,71E-02	1,06E 00	-3,20E-01	-3,57E-01
5,23E-02	2,11E-02	-2,48E-01	-4,04E-01	-1,93E-01	-2,55E-01	1,08E 00	-2,21E-01
-6,51E-02	6,15E-02	3,57E-02	-7,65E-02	-6,22E-03	-2,36E-01	-9,16E-02	1,03E 00

A INVERSE*A

9,65E-01	-3,65E-02	-1,68E-02	-1,71E-02	-1,31E-02	-1,63E-03	-3,24E-02	-8,54E-02
-6,83E-02	9,30E-01	-3,51E-02	-4,08E-02	-2,99E-02	-8,46E-03	-6,29E-02	-1,66E-01
-3,53E-02	-2,14E-03	9,34E-01	-1,81E-01	-1,08E-01	-1,17E-01	-2,49E-02	-7,16E-02
-1,73E-02	-4,38E-03	-2,75E-02	9,27E-01	-4,40E-02	-4,64E-02	-1,30E-02	-3,65E-02
-3,10E-02	-1,17E-02	-4,38E-02	-1,12E-01	9,32E-01	-7,02E-02	-2,40E-02	-6,69E-02
-5,72E-02	-1,52E-02	-8,98E-02	-2,37E-01	-1,43E-01	8,49E-01	-4,29E-02	-1,21E-01
-1,16E-01	-1,15E-01	-6,43E-02	-8,55E-02	-6,02E-02	-2,59E-02	8,94E-01	-2,80E-01
-4,93E-02	-4,85E-02	-2,79E-02	-3,81E-02	-2,66E-02	-1,22E-02	-4,50E-02	8,81E-01

C MATRIX BY ROWS

-3,50E-02	-3,65E-02	-1,68E-02	-1,71E-02	-1,31E-02	-1,63E-03	-3,24E-02	-8,54E-02
-6,83E-02	-6,97E-02	-3.51E-02	-4,08E-02	-2,99E-02	-8.46E-03	-6,29E-02	-1.66E-01
-3,53E-02	-2.14E-03	-6.55E-02	-1,81E-01	-1,08E-01	-1,17E-01	-2.49E-02	-7.16E-02
-1,73E-02	-4,38E-03	-2,75E-02	-7,30E-02	-4,40E-02	-4,64E-02	-1,30E-02	-3,65E-02
-3,10E-02	-1,17E-02	-4,38E-02	-1,12E-01	-6,81E-02	-7.02E-02	-2.40E-02	-6,69E-02
-5,72E-02	-1,52E-02	-8,98E-02	-2,37E-01	-1,43E-01	-1,51E-01	-4,29E-02	-1,21E-01
-1,16E-01	-1,15E-01	-6,43E-02	-8,55E-02	-6,02E-02	-2,59E-02	-1,06E-01	-2,80E-01
-4,93E-02	-4,85E-02	-2,79E-02	-3,81E-02	-2,66E-02	-1,22E-02	-4,50E-02	-1,19E-01

A● MATRIX BY ROWS

1,14E 00	-3,84E-01	-1,24E-01	-1,33E-01	7,11E-02	3.05E-02	1,61E-03	-2,49E-02
-3,23E-01	1,05E 00	-3,33E-02	-3,10E-01	-3,63E-01	-1,60E-02	-6,72E-02	9,04E-04
-2,18E-01	2,36E-02	1,02E 00	-2,27E-01	-1,67E-01	-6,57E-02	-2,72E-01	-2,76E-01
-1,97E-01	6,51E-03	-6,13E-02	9,83E-01	-1,67E-01	-6,92E-04	-8,84E-03	-1,95E-01
-2,67E-01	-2,00E-02	-1,21E-01	-2,30E-02	9,86E-01	-1,59E-01	4,39E-02	-3,58E-01
2,06E-01	-3,95E-01	-1,46E-01	-2,92E-01	-1,67E-01	9,44E-01	-2,86E-01	-2,74E-01
-2,92E-02	-8,73E-02	-2,55E-01	-3,34E-01	-1,59E-01	-1,80E-01	1,00E 00	-4,30E-01
-9,34E-02	2,41E-02	3,31E-02	-5,34E-02	4,70E-03	-2,11E-01	-1,20E-01	9,57E-01

A INVERSE*A

9,43E-01	-6,10E-02	-2,50E-02	-1,99E-02	-1,67E-02	2.92E-03	-5,31E-02	-1,40E-01
-1,11E-01	8,84E-01	-5,24E-02	-5,13E-02	-3,98E-02	-3,17E-03	-1,03E-01	-2,70E-01
-4,74E-02	7,45E-03	8,98E-01	-2,91E-01	-1,73E-01	-1,92E-01	-3,10E-02	-9.16E-02
-2,42E-02	-2,96E-03	-4,28E-02	8,83E-01	-7,01E-02	-7,53E-02	-1.74E-02	-4,97E-02
-4,44E-02	-1,30E-02	-6,79E-02	-1,78E-01	8,92E-01	-1,13E-01	-3,36E-02	-9,43E-02
-8,01E-02	-1,12E-02	-1,40E-01	-3,80E-01	-2,28E-01	7,55E-01	-5,78E-02	-1,65E-01
-1,87E-01	-1,90E-01	-9,65E-02	-1,14E-01	-8,31E-02	-2.49E-02	8,28E-01	-4,53E-01
-7,94E-02	-8,01E-02	-4,19E-02	-5,12E-02	-3,70E-02	-1,25E-02	-7,28E-02	8,08E-01

C MATRIX BY ROWS

-5,69E-02	-6,10E-02	-2,50E-02	-1,99E-02	-1,67E-02	2,92E-03	-5,31E-02	-1,40E-01
-1,11E-01	-1,16E-01	-5,24E-02	-5,13E-02	-3,98E-02	-3,17E-03	-1,03E-01	-2,70E-01
-4,74E-02	7,45E-03	-1,02E-01	-2,91E-01	-1,73E-01	-1,92E-01	-3,10E-02	-9,16E-02
-2,42E-02	-2,96E-03	-4,28E-02	-1,17E-01	-7,01E-02	-7,53E-02	-1,74E-02	-4,97E-02
-4,44E-02	-1,30E-02	-6,79E-02	-1,78E-01	-1,08E-01	-1,13E-01	-3,36E-02	-9,43E-02
-8,01E-02	-1,12E-02	-1,40E-01	-3,80E-01	-2,28E-01	-2,45E-01	-5,78E-02	-1,65E-01
-1,87E-01	-1,90E-01	-9,65E-02	-1,14E-01	-8,31E-02	-2,49E-02	-1,72E-01	-4,53E-01
-7,94E-02	-8,01E-02	-4,19E-02	-5,12E-02	-3,70E-02	-1,25E-02	-7,28E-02	-1,92E-01

A* MATRIX BY ROWS

1,16E 00	-3,59E-01	-1,25E-01	-1,59E-01	5,80E-02	7.43E-03	1,92E-02	2,04E-02
-2,64E-01	1,13E 00	-3,63E-02	-3,87E-01	-4,02E-01	-8,81E-02	-7,50E-03	1,54E-01
-2,70E-01	-7,19E-02	1,05E 00	-6,08E-02	-7,53E-02	6,76E-02	-3,30E-01	-4,21E-01
-2,11E-01	-2,08E-02	-5,06E-02	1,03E 00	-1,38E-01	4,04E-02	-2,48E-02	-2,35E-01
-2,80E-01	-4,72E-02	-1,08E-01	3,48E-02	1,02E 00	-1,15E-01	2,89E-02	-3,95E-01
1,53E-01	-4,96E-01	-1,07E-01	-1,03E-01	-6,12E-02	1,09E 00	-3,45E-01	-4,23E-01
7,08E-02	5,34E-02	-2,58E-01	-4,57E-01	-2,22E-01	-2,97E-01	1,10E 00	-1,71E-01
-5,88E-02	7,25E-02	3,25E-02	-9,46E-02	-1,62E-02	-2,51E-01	-8,48E-02	1,05E 00

A INVERSE*A

9,67E-01	-3,19E-02	-1,97E-02	-2,89E-02	-1,98E-02	-1,06E-02	-3,01E-02	-7,97E-02
-6,55E-02	9,38E-01	-4,08E-02	-6,32E-02	-4,27E-02	-2,52E-02	-5,91E-02	-1,57E-01
-4,99E-02	-1,97E-02	9,31E-01	-1,76E-01	-1,07E-01	-1,10E-01	-3,89E-02	-1,08E-01
-2,29E-02	-1,09E-02	-2,92E-02	9,28E-01	-4,41E-02	-4,43E-02	-1,83E-02	-5,04E-02
-3,91E-02	-2,08E-02	-4,67E-02	-1,13E-01	9,31E-01	-6,82E-02	-3,17E-02	-8,70E-02
-7,52E-02	-3,62E-02	-9,53E-02	-2,36E-01	-1,44E-01	8,56E-01	-6,01E-02	-1,66E-01
-1,13E-01	-1,03E-01	-7,40E-02	-1,22E-01	-8,10E-02	-5,25E-02	8,99E-01	-2,69E-01
-4,81E-02	-4,38E-02	-3,20E-02	-5,33E-02	-3,54E-02	-2,34E-02	-4,31E-02	8,85E-01

C MATRIX BY ROWS

-3.31E-02	-3.19E-02	-1.97E-02	-2.89E-02	-1.98E-02	-1.06E-02	-3.01E-02	-7.97E-02
-6.55E-02	-6.17E-02	-4.08E-02	-6.32E-02	-4.27E-02	-2.52E-02	-5.91E-02	-1.57E-01
-4.99E-02	-1.97E-02	-6.91E-02	-1.76E-01	-1.07E-01	-1.10E-01	-3.89E-02	-1.08E-01
-2.29E-02	-1.09E-02	-2.92E-02	-7.23E-02	-4.41E-02	-4.43E-02	-1.83E-02	-5.04E-02
-3.91E-02	-2.08E-02	-4.67E-02	-1.13E-01	-6.92E-02	-6.82E-02	-3.17E-02	-8.70E-02
-7.52E-02	-3.62E-02	-9.53E-02	-2.36E-01	-1.44E-01	-1.44E-01	-6.01E-02	-1.66E-01
-1.13E-01	-1.03E-01	-7.40E-02	-1.22E-01	-8.10E-02	-5.25E-02	-1.01E-01	-2.69E-01
-4.81E-02	-4.38E-02	-3.20E-02	-5.33E-02	-3.54E-02	-2.34E-02	-4.31E-02	-1.15E-01

A* MATRIX BY ROWS

1.15E 00	-3.74E-01	-1.26E-01	-1.48E-01	6.34E-02	1.85E-02	8.27E-03	-7.94E-03
-3.03E-01	1.08E 00	-4.08E-02	-3.58E-01	-3.89E-01	-5.58E-02	-4.60E-02	5.45E-02
-2.52E-01	-2.73E-02	1.02E 00	-1.73E-01	-1.39E-01	-1.76E-02	-3.07E-01	-3.67E-01
-2.08E-01	-8.82E-03	-6.03E-02	9.98E-01	-1.59E-01	1.33E-02	-1.96E-02	-2.22E-01
-2.78E-01	-3.63E-02	-1.20E-01	-7.98E-03	9.93E-01	-1.45E-01	3.24E-02	-3.88E-01
1.67E-01	-4.52E-01	-1.42E-01	-2.36E-01	-1.37E-01	9.95E-01	-3.25E-01	-3.75E-01
3.23E-03	-3.32E-02	-2.68E-01	-4.14E-01	-2.03E-01	-2.47E-01	1.04E 00	-3.42E-01
-8.24E-02	4.25E-02	2.86E-02	-8.09E-02	-1.03E-02	-2.34E-01	-1.08E-01	9.86E-01

A INVERSE*A

9.47E-01	-5.26E-02	-2.86E-02	-3.67E-02	-2.61E-02	-1.02E-02	-4.82E-02	-1.28E-01
-1.04E-01	8.99E-01	-5.93E-02	-8.25E-02	-5.73E-02	-2.75E-02	-9.43E-02	-2.50E-01
-6.73E-02	-1.85E-02	8.95E-01	-2.76E-01	-1.67E-01	-1.75E-01	-5.06E-02	-1.42E-01
-3.17E-02	-1.24E-02	-4.41E-02	8.87E-01	-6.84E-02	-7.02E-02	-2.47E-02	-6.86E-02
-5.50E-02	-2.60E-02	-7.04E-02	-1.75E-01	8.93E-01	-1.07E-01	-4.38E-02	-1.21E-01
-1.04E-01	-4.16E-02	-1.44E-01	-3.67E-01	-2.23E-01	7.72E-01	-8.13E-02	-2.26E-01
-1.77E-01	-1.68E-01	-1.08E-01	-1.64E-01	-1.11E-01	-6.31E-02	8.40E-01	-4.24E-01
-7.54E-02	-7.12E-02	-4.68E-02	-7.22E-02	-4.88E-02	-2.85E-02	-6.81E-02	8.19E-01

C MATRIX BY ROWS

-5,27E-02	-5,26E-02	-2,86E-02	-3,67E-02	-2,61E-02	-1,02E-02	-4,82E-02	-1,28E-01
-1,04E-01	-1,01E-01	-5,93E-02	-8,25E-02	-5,73E-02	-2,75E-02	-9,43E-02	-2.50E-01
-6,73E-02	-1.85E-02	-1,05E-01	-2,76E-01	-1,67E-01	-1,75E-01	-5,06E-02	-1,42E-01
-3,17E-02	-1,24E-02	-4,41E-02	-1,13E-01	-6,84E-02	-7,02E-02	-2,47E-02	-6,86E-02
-5,50E-02	-2,60E-02	-7,04E-02	-1.75E-01	-1.07E-01	-1.07E-01	-4,38E-02	-1,21E-01
-1,04E-01	-4,16E-02	-1,44E-01	-3,67E-01	-2,23E-01	-2,28E-01	-8,13E-02	-2,26E-01
-1,77E-01	-1,68E-01	-1,08E-01	-1,64E-01	-1,11E-01	-6,31E-02	-1,60E-01	-4,24E-01
-7,54E-02	-7,12E-02	-4,68E-02	-7,22E-02	-4,88E-02	-2,85E-02	-6,81E-02	-1,81E-01

A* MATRIX BY ROWS

1,16E 00	-3,52E-01	-1.27E-01	-1,69E-01	5.22E-02	-1,18E-03	2,34E-02	3,10E-02
-2,53E-01	1.16E 00	-4,30E-02	-4,23E-01	-4.22E-01	-1,17E-01	5,42E-03	1,87E-01
-2,97E-01	-1,09E-01	1,05E 00	-3,00E-02	-5,98E-02	9,72E-02	-3,56E-01	-4,89E-01
-2,20E-01	-3,21E-02	-5,09E-02	1,04E 00	-1.34E-01	4,87E-02	-3,31E-02	-2,56E-01
-2,89E-01	-5,93E-02	-1,09E-01	4,22E-02	1.02E 00	-1.07E-01	1,98E-02	-4,19E-01
1,23E-01	-5,37E-01	-1,08E-01	-7,23E-02	-4,59E-02	1,12E 00	-3,75E-01	-5,00E-01
8,96E-02	8,79E-02	-2,70E-01	-5,18E-01	-2,56E-01	-3,46E-01	1,12E 00	-1,19E-01
-5,25E-02	8,41E-02	2,83E-02	-1,16E-01	-2,79E-02	-2.67E-01	-7,78E-02	1,06E 00

A INVERSE*A

9,68E-01	-2,74E-02	-2,37E-02	-4,37E-02	-2,83E-02	-2,14E-02	-2,82E-02	-7,54E-02
-6,41E-02	9,46E-01	-4,86E-02	-9,14E-02	-5,89E-02	-4,55E-02	-5,64E-02	-1,51E-01
-6,84E-02	-4,10E-02	9,25E-01	-1,76E-01	-1,09E-01	-1,04E-01	-5,65E-02	-1,54E-01
-3,01E-02	-1,88E-02	-3,20E-02	9,26E-01	-4,56E-02	-4,32E-02	-2,50E-02	-6,81E-02
-4,98E-02	-3,22E-02	-5,15E-02	-1,17E-01	9,27E-01	-6,80E-02	-4,16E-02	-1,13E-01
-9,86E-02	-6,19E-02	-1,05E-01	-2,40E-01	-1,49E-01	8,59E-01	-8,20E-02	-2,23E-01
-1,12E-01	-9,29E-02	-8,76E-02	-1,68E-01	-1.08E-01	-8,54E-02	9,02E-01	-2,63E-01
-4,81E-02	-3,97E-02	-3,78E-02	-7,29E-02	-4,67E-02	-3,72E-02	-4,22E-02	8,87E-01

C MATRIX BY ROWS

-3,20E-02	-2,74E-02	-2,37E-02	-4,37E-02	-2,83E-02	-2,14E-02	-2,82E-02	-7,54E-02
-6,41E-02	-5,40E-02	-4,86E-02	-9,14E-02	-5,89E-02	-4.55E-02	-5,64E-02	-1,51E-01
-6,84E-02	-4,10E-02	-7,52E-02	-1,76E-01	-1,09E-01	-1,04E-01	-5,65E-02	-1,54E-01
-3,01E-02	-1,88E-02	-3,20E-02	-7,37E-02	-4,56E-02	-4,32E-02	-2,50E-02	-6,81E-02
-4,98E-02	-3,22E-02	-5.15E-02	-1,17E-01	-7,26E-02	-6.80E-02	-4.16E-02	-1,13E-01
-9,86E-02	-6,19E-02	-1.05E-01	-2,40E-01	-1,49E-01	-1,41E-01	-8,20E-02	-2,23E-01
-1,12E-01	-9,29E-02	-8,76E-02	-1,68E-01	-1,08E-01	-8,54E-02	-9,84E-02	-2,63E-01
-4,81E-02	-3,97E-02	-3.78E-02	-7,29E-02	-4,67E-02	-3,72E-02	-4,22E-02	-1,13E-01

A* MATRIX BY ROWS

1,16E 00	-3,61E-01	-1,28E-01	-1,65E-01	5,40E-02	3.98E-03	1,62E-02	1,22E-02
-2,80E-01	1.12E 00	-5,01E-02	-4,16E-01	-4.21E-01	-1,04E-01	-2,09E-02	1,18E-01
-2,94E-01	-8,87E-02	1,03E 00	-1,10E-01	-1,06E-01	3,96E-02	-3,50E-01	-4,76E-01
-2,21E-01	-2,74E-02	-5,93E-02	1,02E 00	-1,50E-01	2,98E-02	-3,26E-02	-2,56E-01
-2,92E-01	-5,60E-02	-1,20E-01	9,58E-03	1,00E 00	-1,29E-01	1,83E-02	-4,24E-01
1,20E-01	-5,19E-01	-1,38E-01	-1,70E-01	-1,03E-01	1,06E 00	-3,73E-01	-4,97E-01
4,15E-02	3,14E-02	-2,84E-01	-5,11E-01	-2,56E-01	-3,27E-01	1,08E 00	-2,38E-01
-6,94E-02	6,45E-02	2,30E-02	-1,14E-01	-2,86E-02	-2,62E-01	-9,39E-02	1,02E 00

A INVERSE*A

9,52E-01	-4,27E-02	-3,31E-02	-5,74E-02	-3,77E-02	-2,63E-02	-4,27E-02	-1,14E-01
-9,55E-02	9,16E-01	-6,81E-02	-1,21E-01	-7,92E-02	-5,73E-02	-8,48E-02	-2,26E-01
-9,21E-02	-5,02E-02	8,92E-01	-2,60E-01	-1,60E-01	-1,57E-01	-7,49E-02	-2,05E-01
-4,10E-02	-2,40E-02	-4,60E-02	8,92E-01	-6,68E-02	-6,45E-02	-3,37E-02	-9,21E-02
-6,84E-02	-4,20E-02	-7,39E-02	-1,71E-01	8,94E-01	-1,01E-01	-5,67E-02	-1,55E-01
-1,34E-01	-7,90E-02	-1,50E-01	-3,54E-01	-2,18E-01	7,90E-01	-1,11E-01	-3,02E-01
-1,66E-01	-1,43E-01	-1,23E-01	-2,26E-01	-1,46E-01	-1,10E-01	8,53E-01	-3,93E-01
-7,12E-02	-6,08E-02	-5,31E-02	-9,83E-02	-6,36E-02	-4,82E-02	-6,29E-02	8,32E-01

C MATRIX BY ROWS

-4,79E-02	-4,27E-02	-3,31E-02	-5,74E-02	-3,77E-02	-2,63E-02	-4,27E-02	-1,14E-01
-9,55E-02	-8,37E-02	-6,81E-02	-1,21E-01	-7,92E-02	-5,73E-02	-8,48E-02	-2,26E-01
-9,21E-02	-5,02E-02	-1,08E-01	-2,60E-01	-1,60E-01	-1,57E-01	-7,49E-02	-2,05E-01
-4,10E-02	-2,40E-02	-4,60E-02	-1,08E-01	-6,68E-02	-6,45E-02	-3,37E-02	-9,21E-02
-6,84E-02	-4,20E-02	-7,39E-02	-1,71E-01	-1,06E-01	-1,01E-01	-5,67E-02	-1,55E-01
-1,34E-01	-7,90E-02	-1,50E-01	-3,54E-01	-2,18E-01	-2,10E-01	-1,11E-01	-3,02E-01
-1,66E-01	-1,43E-01	-1,23E-01	-2,26E-01	-1,46E-01	-1,10E-01	-1,47E-01	-3,93E-01
-7,12E-02	-6,08E-02	-5,31E-02	-9,83E-02	-6,36E-02	-4,82E-02	-6,29E-02	-1,68E-01

A• MATRIX BY ROWS

1,17E 00	-3,47E-01	-1,29E-01	-1,78E-01	4,71E-02	-8,46E-03	2,63E-02	3,82E-02
-2,45E-01	1,17E 00	-5,03E-02	-4,55E-01	-4,40E-01	-1,42E-01	1,37E-02	2,07E-01
-3,21E-01	-1,40E-01	1,05E 00	-1,28E-02	-5,19E-02	1,17E-01	-3,80E-01	-5,51E-01
-2,28E-01	-4,19E-02	-5,24E-02	1,05E 00	-1,33E-01	5,38E-02	-4,07E-02	-2,76E-01
-2,98E-01	-7,02E-02	-1,11E-01	4,44E-02	1,02E 00	-1,02E-01	1,11E-02	-4,42E-01
9,45E-02	-5,73E-01	-1,13E-01	-5,74E-02	-3,98E-02	1,14E 00	-4,03E-01	-5,72E-01
1,00E-01	1,12E-01	-2,83E-01	-5,73E-01	-2,87E-01	-3,89E-01	1,14E 00	-8,71E-02
-4,91E-02	9,22E-02	2,37E-02	-1,35E-01	-3,89E-02	-2,82E-01	-7,36E-02	1,07E 00

A INVERSE*A

9,67E-01	-2,53E-02	-2,88E-02	-5,94E-02	-3,75E-02	-3,21E-02	-2,86E-02	-7,69E-02
-6,72E-02	9,49E-01	-5,87E-02	-1,22E-01	-7,69E-02	-6,61E-02	-5,79E-02	-1,56E-01
-8,90E-02	-6,21E-02	9,14E-01	-1,88E-01	-1,17E-01	-1,06E-01	-7,54E-02	-2,04E-01
-3,83E-02	-2,70E-02	-3,66E-02	9,20E-01	-4,99E-02	-4,51E-02	-3,25E-02	-8,80E-02
-6,23E-02	-4,41E-02	-5,91E-02	-1,29E-01	9,20E-01	-7,24E-02	-5,30E-02	-1,43E-01
-1,25E-01	-8,83E-02	-1,20E-01	-2,61E-01	-1,63E-01	8,53E-01	-1,06E-01	-2,88E-01
-1,19E-01	-9,03E-02	-1,05E-01	-2,19E-01	-1,38E-01	-1,19E-01	8,97E-01	-2,77E-01
-5,14E-02	-3,88E-02	-4,54E-02	-9,46E-02	-5,97E-02	-5,16E-02	-4,42E-02	8,81E-01

C MATRIX BY ROWS

-3,31E-02	-2,53E-02	-2,88E-02	-5,94E-02	-3,75E-02	-3,21E-02	-2,86E-02	-7,69E-02
-6,72E-02	-5,11E-02	-5,87E-02	-1,22E-01	-7,69E-02	-6,61E-02	-5,79E-02	-1,56E-01
-8,90E-02	-6,21E-02	-8,56E-02	-1,88E-01	-1,17E-01	-1,06E-01	-7,54E-02	-2.04E-01
-3,83E-02	-2,70E-02	-3,66E-02	-7,99E-02	-4,99E-02	-4,51E-02	-3,25E-02	-8,80E-02
-6,23E-02	-4,41E-02	-5,91E-02	-1,29E-01	-8,04E-02	-7,24E-02	-5.30E-02	-1,43E-01
-1,25E-01	-8,83E-02	-1,20E-01	-2,61E-01	-1,63E-01	-1.47E-01	-1,06E-01	-2,88E-01
-1,19E-01	-9,03E-02	-1,05E-01	-2,19E-01	-1,38E-01	-1,19E-01	-1,03E-01	-2,77E-01
-5,14E-02	-3,88E-02	-4,54E-02	-9,46E-02	-5,97E-02	-5,16E-02	-4,42E-02	-1,19E-01

A* MATRIX BY ROWS

1,16E 00	-3,51E-01	-1,31E-01	-1,80E-01	4,58E-02	-8,47E-03	2,27E-02	2,86E-02
-2,61E-01	1,16E 00	-5,89E-02	-4,66E-01	-4,48E-01	-1,45E-01	-6,09E-04	1.70E-01
-3,31E-01	-1,42E-01	1,03E 00	-6,05E-02	-8,06E-02	8,59E-02	-3,87E-01	-5,72E-01
-2,32E-01	-4,35E-02	-5,90E-02	1,03E 00	-1,43E-01	4,30E-02	-4,42E-02	-2,85E-01
-3,04E-01	-7,32E-02	-1,20E-01	2,27E-02	1,01E 00	-1,16E-01	5,77E-03	-4,56E-01
7,88E-02	-5,78E-01	-1,37E-01	-1,18E-01	-7,66E-02	1,11E 00	-4,15E-01	-6,05E-01
7,19E-02	8,44E-02	-2,99E-01	-5,97E-01	-3,03E-01	-3,97E-01	1,11E 00	-1,55E-01
-5,92E-02	8,25E-02	1,77E-02	-1,44E-01	-4,49E-02	-2,85E-01	-8,28E-02	1,05E 00

A INVERSE*A

9,55E-01	-3,51E-02	-3,79E-02	-7,68E-02	-4,87E-02	-4,10E-02	-3,89E-02	-1,04E-01
-9,08E-02	9,29E-01	-7,74E-02	-1,58E-01	-1,00E-01	-8,47E-02	-7,86E-02	-2,11E-01
-1,16E-01	-7,91E-02	8,86E-01	-2,53E-01	-1,58E-01	-1,44E-01	-9,78E-02	-2,65E-01
-5,01E-02	-3,46E-02	-4,87E-02	8,93E-01	-6,70E-02	-6,10E-02	-4,24E-02	-1,15E-01
-8,17E-02	-5,70E-02	-7,86E-02	-1,72E-01	8,92E-01	-9,75E-02	-6,92E-02	-1,87E-01
-1,64E-01	-1,13E-01	-1,59E-01	-3,51E-01	-2,19E-01	8,01E-01	-1,39E-01	-3,76E-01
-1,61E-01	-1,24E-01	-1,39E-01	-2,85E-01	-1,81E-01	-1,54E-01	8,61E-01	-3,74E-01
-6,92E-02	-5,32E-02	-5,99E-02	-1,23E-01	-7,80E-02	-6,66E-02	-5,98E-02	8,39E-01

C MATRIX BY ROWS

-4,48E-02	-3,51E-02	-3,79E-02	-7,68E-02	-4,87E-02	-4,10E-02	-3,89E-02	-1,04E-01
-9,08E-02	-7,05E-02	-7,74E-02	-1,58E-01	-1.00E-01	-8,47E-02	-7,86E-02	-2,11E-01
-1,16E-01	-7,91E-02	-1,14E-01	-2,53E-01	-1,58E-01	-1,44E-01	-9,78E-02	-2,65E-01
-5,01E-02	-3,46E-02	-4,87E-02	-1,07E-01	-6,70E-02	-6,10E-02	-4,24E-02	-1,15E-01
-8,17E-02	-5,70E-02	-7,86E-02	-1,72E-01	-1.08E-01	-9,75E-02	-6,92E-02	-1,87E-01
-1,64E-01	-1,13E-01	-1,59E-01	-3,51E-01	-2.19E-01	-1,99E-01	-1,39E-01	-3,76E-01
-1,61E-01	-1,24E-01	-1,39E-01	-2,85E-01	-1,81E-01	-1,54E-01	-1,39E-01	-3,74E-01
-6,92E-02	-5,32E-02	-5,99E-02	-1,23E-01	-7,80E-02	-6.66E-02	-5,98E-02	-1,61E-01

A* MATRIX BY ROWS

1,17E 00	-3,46E-01	-1,31E-01	-1,84E-01	4,39E-02	-1,23E-02	2,67E-02	3,89E-02
-2,47E-01	1.17E 00	-5,70E-02	-4,76E-01	-4,53E-01	-1,57E-01	1,34E-02	2,06E-01
-3,37E-01	-1,57E-01	1,04E 00	-1,95E-02	-5,73E-02	1,17E-01	-3,95E-01	-5,91E-01
-2,33E-01	-4,76E-02	-5,54E-02	1,04E 00	-1,35E-01	5,29E-02	-4,59E-02	-2,89E-01
-3,05E-01	-7,70E-02	-1,16E-01	3,84E-02	1.02E 00	-1,05E-01	4,71E-03	-4,59E-01
7,42E-02	-5,94E-01	-1,24E-01	-6,97E-02	-4,88E-02	1,14E 00	-4,22E-01	-6,21E-01
9,65E-02	1.16E-01	-2,95E-01	-6,11E-01	-3,09E-01	-4,14E-01	1,14E 00	-9,31E-02
-5,06E-02	9,33E-02	1,92E-02	-1,48E-01	-4,67E-02	-2,91E-01	-7,44E-02	1,07E 00

A INVERSE*A

9,62E-01	-2,75E-02	-3,45E-02	-7,35E-02	-4,62E-02	-4,08E-02	-3,22E-02	-8,68E-02
-7,67E-02	9,44E-01	-7,03E-02	-1,50E-01	-9,42E-02	-8,33E-02	-6,56E-02	-1,77E-01
-1,09E-01	-7,90E-02	8,99E-01	-2,16E-01	-1,35E-01	-1,20E-01	-9,30E-02	-2,51E-01
-4,66E-02	-3,39E-02	-4,31E-02	9,08E-01	-5,79E-02	-5,14E-02	-3,98E-02	-1,08E-01
-7,55E-02	-5,48E-02	-6,97E-02	-1,49E-01	9,06E-01	-8,31E-02	-6,45E-02	-1,74E-01
-1,52E-01	-1,11E-01	-1,41E-01	-3,02E-01	-1,89E-01	8,32E-01	-1,30E-01	-3,52E-01
-1,37E-01	-1,00E-01	-1,26E-01	-2,68E-01	-1,69E-01	-1,49E-01	8,83E-01	-3,16E-01
-5,91E-02	-4,31E-02	-5,42E-02	-1,16E-01	-7,27E-02	-6,43E-02	-5,05E-02	8,64E-01

A MATRIX BY ROWS

1.00E 00	3.92E-01	3.26E-01	3.35E-01	1.94E-01	2.95E-01	1.48E-02	0	0	0
2.65E-01	1.00E 00	2.17E-01	1.10E-02	3.48E-01	1.06E-01	3.62E-02	1.87E-01	0	0
3.14E-01	1.96E-01	1.00E 00	3.41E-01	3.64E-01	9.80E-03	1.10E-01	3.72E-02	3.97E-01	0
4.03E-01	5.09E-02	1.96E-01	1.00E 00	3.24E-01	7.87E-02	2.78E-01	3.01E-01	2.94E-01	5.94E-02
8.86E-02	3.59E-01	1.95E-01	1.48E-01	1.00E 00	2.66E-01	1.64E-01	4.14E-02	9.48E-02	3.51E-02
1.06E-01	3.41E-01	3.81E-01	1.16E-01	3.99E-01	1.00E 00	3.60E-01	3.69E-01	1.32E-01	1.64E-01
2.13E-01	8.40E-03	7.80E-02	1.54E-01	2.67E-01	1.05E-01	1.00E 00	2.24E-01	1.07E-01	2.38E-01
0	3.86E-01	6.44E-02	3.11E-01	3.24E-02	1.27E-01	2.68E-02	1.00E 00	2.32E-01	1.41E-02
0	0	8.42E-02	1.98E-01	1.89E-01	3.37E-01	1.75E-01	1.20E-01	1.00E 00	1.59E-01
0	0	0	1.71E-01	1.07E-01	7.15E-02	1.10E-01	3.76E-01	1.74E-01	1.00E 00

A* MATRIX BY ROWS

1.00E 00	-3.92E-01	0	0	0	0	0	0	0	0
-2.65E-01	1.00E 00	0	0	0	0	0	0	0	0
0	0	1.00E 00	-3.41E-01	0	0	0	0	0	0
0	0	-1.96E-01	1.00E 00	0	0	0	0	0	0
0	0	0	0	1.00E 00	-2.66E-01	0	0	0	0
0	0	0	0	-3.99E-01	1.00E 00	0	0	0	0
0	0	0	0	0	0	1.00E 00	-2.24E-01	0	0
0	0	0	0	0	0	-2.68E-02	1.00E 00	0	0
0	0	0	0	0	0	0	0	1.00E 00	-1.59E-01
0	0	0	0	0	0	0	0	-1.74E-01	1.00E 00

C MATRIX BY ROWS

-1,04E-01	0	2,60E-01	2,24E-01	7,61E-02	2,44E-01	1,48E-02	-3,32E-03	0	0
0	-1,04E-01	2,15E-01	-6,31E-02	3,05E-01	1,39E-02	3,12E-02	1,79E-01	0	0
2,62E-01	7,26E-02	-6,70E-02	0	3,61E-01	-8,70E-02	1,09E-01	1,25E-02	3,98E-01	-6,32E-02
3,90E-01	-1,07E-01	0	-6,70E-02	2,93E-01	-7,36E-03	2,70E-01	2,39E-01	2,84E-01	1,26E-02
-6,34E-03	3,24E-01	1,66E-01	8,16E-02	-1,06E-01	0	1,63E-01	4,49E-03	8,87E-02	2,00E-02
1,56E-02	3,00E-01	3,59E-01	-1,41E-02	0	-1,06E-01	3,50E-01	2,88E-01	1,03E-01	1,43E-01
2,11E-01	-7,52E-02	4,78E-02	1,27E-01	2,25E-01	3,39E-02	-6,02E-03	0	6,57E-02	2,21E-01
-1,02E-01	3,86E-01	3,38E-03	2,89E-01	-1,82E-02	1,18E-01	0	-6,02E-03	2,30E-01	-2,29E-02
0	0	4,53E-02	1,69E-01	5,42E-02	2,87E-01	1,71E-01	8,04E-02	-2,78E-02	0
0	0	-3,36E-02	1,71E-01	7,84E-02	4,31E-02	9,97E-02	3,51E-01	0	-2,78E-02

A* MATRIX BY ROWS

1,10E 00	-4,33E-01	-1,75E-01	-2,49E-01	4,36E-02	-2,38E-01	-2,58E-03	7,36E-02	0	0
-2,92E-01	1,10E 00	-1,46E-01	1,22E-01	-2,85E-01	5,05E-02	-2,73E-02	-1,80E-01	0	0
-1,29E-01	-1,09E-01	1,07E 00	-3,64E-01	-2,61E-01	8,45E-02	-1,65E-02	6,89E-02	-3,01E-01	6,75E-02
-3,38E-01	1,21E-01	-2,10E-01	1,07E 00	-2,22E-01	-9,74E-03	-2,49E-01	-2,36E-01	-2,06E-01	-2,50E-02
1,05E-02	-2,44E-01	-7,08E-02	-8,53E-02	1,11E 00	-2,94E-01	-7,02E-02	7,20E-02	-6,13E-02	1,79E-02
-1,82E-02	-1,71E-01	-2,92E-01	4,66E-02	-4,41E-01	1,11E 00	-2,85E-01	-2,86E-01	-6,77E-02	-1,35E-01
-2,34E-01	1,62E-01	-4,70E-02	-6,25E-02	-2,30E-01	-7,32E-03	1,01E 00	-2,26E-01	-1,41E-02	-2,26E-01
1,08E-01	-3,88E-01	-2,10E-03	-2,85E-01	2,42E-02	-1,17E-01	-2,70E-02	1,01E 00	-2,28E-01	2,88E-02
0	0	-5,07E-02	-1,42E-01	-4,17E-02	-2,80E-01	-1,56E-01	-2,45E-02	1,03E 00	-1,64E-01
0	0	4,16E-02	-1,42E-01	-6,89E-02	7,00E-03	-6,98E-02	-3,37E-01	-1,79E-01	1,03E 00

A INVERSE*A

8,27E-01	-9,01E-02	-5,63E-02	3,46E-02	-1,47E-01	7,52E-02	-1,85E-01	-1,28E-01	-1,99E-01	-2,60E-02
-1,83E-02	7,97E-01	-2,11E-02	-9,12E-02	1,20E-03	-1,10E-03	-5,76E-02	2,67E-02	-1,39E-01	3,51E-03
2,67E-02	-7,50E-02	8,58E-01	-1,59E-01	-2,06E-02	-1,96E-01	-8,84E-02	2,47E-03	4,64E-03	-2,45E-02
3,59E-02	-1,83E-01	-1,50E-01	7,24E-01	-1,93E-02	-2,14E-01	-7,78E-02	1,15E-02	-7,09E-02	-5,78E-02
-1,11E-01	7,52E-02	-5,04E-02	-4,54E-03	7,63E-01	-2,03E-02	-4,91E-02	-9,33E-02	-8,91E-02	-2,38E-02
-1,30E-01	-4,93E-02	-2,41E-02	-1,57E-01	-3,09E-01	9,30E-01	-3,75E-02	-8,10E-02	-2,14E-01	-2,88E-02
-3,81E-02	-8,13E-02	-8,03E-02	-1,10E-01	-4,32E-02	-6,98E-02	8,78E-01	-1,10E-01	-7,64E-02	-4,70E-04
-1,27E-01	4,35E-02	-1,07E-01	3,65E-02	-2,08E-01	-2,99E-02	-1,65E-01	8,17E-01	-8,61E-02	-2,07E-02
-1,10E-01	-1,07E-01	-1,16E-01	-2,94E-02	-9,58E-02	2,82E-02	-1,54E-01	-1,21E-01	8,69E-01	-7,73E-02
-4,33E-02	-1,45E-01	-3,76E-02	-1,04E-01	-4,36E-02	-4,08E-02	-6,72E-02	-4,14E-02	-1,34E-01	9,73E-01

C MATRIX BY ROWS

-1,73E-01	-9,01E-02	-5,63E-02	3,46E-02	-1,47E-01	7,52E-02	-1,85E-01	-1,28E-01	-1,99E-01	-2,60E-02
-1,83E-02	-2,03E-01	-2,11E-02	-9,12E-02	1,20E-03	-1,10E-03	-5,76E-02	2,67E-02	-1,39E-01	3,51E-03
2,67E-02	-7,50E-02	-1,42E-01	-1,59E-01	-2,06E-02	-1,96E-01	-8,84E-02	2,47E-03	4,64E-03	-2,45E-02
3,59E-02	-1,83E-01	-1,50E-01	-2,76E-01	-1,93E-02	-2,14E-01	-7,78E-02	1,15E-02	-7,09E-02	-5,78E-02
-1,11E-01	7,52E-02	-5,04E-02	-4,54E-03	-2,37E-01	-2,03E-02	-4,91E-02	-9,33E-02	-8,91E-02	-2,38E-02
-1,30E-01	-4,93E-02	-2,41E-02	-1,57E-01	-3,09E-01	-6,97E-02	-3,75E-02	-8,10E-02	-2,14E-01	-2,88E-02
-3,81E-02	-8,13E-02	-8,03E-02	-1,10E-01	-4,32E-02	-6,98E-02	-1,22E-01	-1,10E-01	-7,64E-02	-4,70E-04
-1,27E-01	4,35E-02	-1,07E-01	3,65E-02	-2,08E-01	-2,99E-02	-1,65E-01	-1,83E-01	-8,61E-02	-2,07E-02
-1,10E-01	-1,07E-01	-1,16E-01	-2,94E-02	-9,58E-02	2,82E-02	-1,54E-01	-1,21E-01	-1,31E-01	-7,73E-02
-4,33E-02	-1,45E-01	-3,76E-02	-1,04E-01	-4,36E-02	-4,08E-02	-6,72E-02	-4,14E-02	-1,34E-01	-2,67E-02

A* MATRIX BY ROWS

9,24E-01	-3,67E-01	-1,70E-01	-3,47E-02	-6,25E-02	-5,31E-02	-1,52E-01	-8,01E-02	-1,02E-01	-7,21E-03
-2,12E-01	8,65E-01	-1,16E-01	-9,13E-03	-1,50E-01	3,94E-02	1,17E-02	-5,39E-02	-7,28E-02	1,70E-02
-4,93E-02	-8,60E-02	1,02E 00	-4,33E-01	-2,09E-01	-6,94E-02	-1,02E-02	1,21E-01	-1,98E-01	8,92E-02
-1,60E-01	-3,24E-02	-2,42E-01	8,13E-01	-5,20E-02	-1,98E-01	-1,44E-01	-5,99E-02	-1,41E-01	-4,52E-02
-7,65E-02	-6,44E-02	-8,77E-02	2,34E-02	9,29E-01	-2,62E-01	-8,34E-02	-1,52E-02	-5,45E-02	8,40E-03
-5,23E-02	-1,71E-01	-1,91E-01	-3,93E-02	-5,86E-01	1,12E 00	-1,68E-01	-2,39E-01	-1,69E-01	-1,37E-01
-1,72E-01	9,07E-02	-5,59E-02	-1,53E-01	-1,22E-01	-5,19E-02	9,92E-01	-2,29E-01	1,08E-02	-1,97E-01
-4,12E-03	-1,93E-01	-3,50E-02	-1,05E-01	-1,44E-01	-7,54E-02	-1,28E-01	8,31E-01	-2,11E-01	4,00E-02
-6,24E-02	-3,41E-02	-1,11E-01	-4,77E-02	-2,11E-02	-1,72E-01	-2,52E-01	-9,58E-02	1,00E 00	-2,19E-01
2,33E-02	-1,22E-01	8,40E-02	-2,16E-01	-7,26E-03	-1,97E-03	-3,67E-02	-2,84E-01	-2,44E-01	1,03E 00

A INVERSE*A

7,38E-01	-1,29E-01	-4,01E-02	8,39E-02	-2,01E-01	1,51E-01	-2,50E-01	-1,59E-01	-3,02E-01	-2,83E-02
-1,95E-02	6,75E-01	-2,38E-03	-1,25E-01	1,72E-02	1,95E-02	-6,73E-02	6,73E-02	-2,20E-01	2,27E-02
7,21E-02	-7,90E-02	7,73E-01	-2,00E-01	3,01E-02	-3,07E-01	-1,33E-01	2,49E-02	7,81E-02	-3,09E-02
9,67E-02	-2,38E-01	-2,14E-01	6,16E-01	4,52E-02	-3,16E-01	-8,55E-02	4,67E-02	-3,51E-02	-8,41E-02
-1,52E-01	1,46E-01	-5,08E-02	8,04E-04	6,38E-01	-2,72E-02	-2,81E-02	-1,13E-01	-1,15E-01	-2,72E-02
-1,63E-01	-3,97E-02	4,19E-02	-2,43E-01	-4,60E-01	9,00E-01	3,69E-02	-6,82E-02	-3,00E-01	-1,65E-02
-3,33E-02	-1,03E-01	-9,44E-02	-1,47E-01	-9,74E-03	-8,77E-02	8,32E-01	-1,67E-01	-7,88E-02	1,94E-02
-1,67E-01	9,43E-02	-1,43E-01	9,31E-02	-2,84E-01	-3,45E-02	-2,25E-01	7,36E-01	-8,89E-02	-2,06E-02
-1,57E-01	-1,44E-01	-1,55E-01	-5,86E-03	-1,11E-01	9,13E-02	-2,02E-01	-1,67E-01	8,29E-01	-1,31E-01
-4,74E-02	-2,15E-01	-1,92E-02	-1,42E-01	-2,98E-02	-4,82E-02	-6,54E-02	-4,27E-02	-1,89E-01	9,68E-01

C MATRIX BY ROWS

-2.62E-01	-1.29E-01	-4.01E-02	8.39E-02	-2.01E-01	1.51E-01	-2.50E-01	-1.59E-01	-3.02E-01	-2.83E-02
-1.95E-02	-3.25E-01	-2.38E-03	-1.25E-01	1.72E-02	1.95E-02	-6.73E-02	6.73E-02	-2.20E-01	2.27E-02
7.21E-02	-7.90E-02	-2.27E-01	-2.00E-01	3.01E-02	-3.07E-01	-1.33E-01	2.49E-02	7.81E-02	-3.09E-02
9.67E-02	-2.38E-01	-2.14E-01	-3.84E-01	4.52E-02	-3.16E-01	-8.55E-02	4.67E-02	-3.51E-02	-8.41E-02
-1.52E-01	1.46E-01	-5.08E-02	8.04E-04	-3.62E-01	-2.72E-02	-2.81E-02	-1.13E-01	-1.15E-01	-2.72E-02
-1.63E-01	-3.97E-02	4.19E-02	-2.43E-01	-4.60E-01	-9.96E-02	3.69E-02	-6.82E-02	-3.00E-01	-1.65E-02
-3.33E-02	-1.03E-01	-9.44E-02	-1.47E-01	-9.74E-03	-8.77E-02	-1.68E-01	-1.67E-01	-7.88E-02	1.94E-02
-1.67E-01	9.43E-02	-1.43E-01	9.31E-02	-2.84E-01	-3.45E-02	-2.25E-01	-2.64E-01	-8.89E-02	-2.06E-02
-1.57E-01	-1.44E-01	-1.55E-01	-5.86E-03	-1.11E-01	9.13E-02	-2.02E-01	-1.67E-01	-1.71E-01	-1.31E-01
-4.74E-02	-2.15E-01	-1.92E-02	-1.42E-01	-2.98E-02	-4.82E-02	-6.54E-02	-4.27E-02	-1.89E-01	-3.18E-02

A* MATRIX BY ROWS

1.12E 00	-4.07E-01	-2.23E-01	-2.35E-01	5.38E-02	-2.63E-01	-3.55E-02	2.28E-02	4.77E-02	4.29E-03
-2.77E-01	1.13E 00	-1.78E-01	1.08E-01	-2.62E-01	2.25E-02	-2.89E-02	-1.80E-01	4.39E-02	-2.68E-02
-1.45E-01	-1.37E-01	1.13E 00	-4.21E-01	-3.21E-01	1.29E-01	5.79E-02	8.68E-02	-3.79E-01	5.74E-02
-3.43E-01	7.10E-02	-1.69E-01	1.01E 00	-2.58E-01	-1.58E-02	-2.12E-01	-2.00E-01	-2.63E-01	-1.12E-02
-8.94E-03	-2.56E-01	-6.59E-02	-6.14E-02	1.12E 00	-2.72E-01	-1.09E-01	3.84E-02	-7.21E-02	2.24E-02
-3.77E-02	-1.77E-01	-4.01E-01	1.40E-01	-3.77E-01	1.14E 00	-4.04E-01	-3.45E-01	-3.04E-02	-1.69E-01
-2.36E-01	1.56E-01	-5.33E-02	-7.03E-02	-2.77E-01	-3.33E-02	1.04E 00	-1.73E-01	-2.94E-02	-2.52E-01
7.29E-02	-3.79E-01	4.34E-03	-2.87E-01	-9.91E-03	-8.79E-02	-3.09E-02	9.92E-01	-2.60E-01	2.23E-02
2.48E-02	3.35E-03	-2.93E-02	-1.83E-01	-3.94E-02	-3.57E-01	-1.59E-01	-2.19E-02	1.03E 00	-1.04E-01
2.17E-03	6.93E-03	-4.98E-03	-1.34E-01	-7.42E-02	1.30E-02	-9.86E-02	-3.43E-01	-1.55E-01	1.01E 00

A INVERSE*A

8.34E-01	-8.38E-02	-1.12E-01	3.92E-02	-1.38E-01	6.46E-02	-2.24E-01	-1.83E-01	-1.70E-01	-4.07E-02
-1.80E-02	8.20E-01	-5.93E-02	-9.68E-02	1.73E-02	-1.08E-02	-7.70E-02	-1.36E-03	-1.07E-01	-2.85E-02
1.82E-02	-1.10E-01	9.25E-01	-2.39E-01	-8.52E-02	-1.92E-01	-2.53E-02	1.03E-02	-7.45E-02	-1.19E-02
2.41E-02	-2.28E-01	-1.21E-01	6.66E-01	-7.55E-02	-2.34E-01	-5.66E-02	2.68E-02	-1.34E-01	-3.94E-02
-1.32E-01	6.11E-02	-7.14E-02	1.65E-02	7.79E-01	-5.10E-03	-9.90E-02	-1.30E-01	-9.64E-02	-3.71E-02
-1.67E-01	-6.19E-02	-1.22E-01	-9.25E-02	-2.87E-01	9.66E-01	-1.39E-01	-1.34E-01	-2.10E-01	-7.91E-02
-5.03E-02	-9.10E-02	-1.03E-01	-1.14E-01	-9.64E-02	-8.99E-02	8.82E-01	-8.05E-02	-9.59E-02	-2.55E-02
-1.56E-01	4.44E-02	-1.05E-01	1.27E-02	-2.41E-01	-2.40E-02	-1.70E-01	8.09E-01	-1.18E-01	-2.51E-02
-1.02E-01	-1.19E-01	-1.25E-01	-4.97E-02	-9.46E-02	-3.11E-02	-1.91E-01	-1.29E-01	8.62E-01	-3.42E-02
-5.45E-02	-1.46E-01	-7.90E-02	-1.04E-01	-6.65E-02	-3.64E-02	-1.01E-01	-4.77E-02	-1.31E-01	9.64E-01

C MATRIX BY ROWS

-1,66E-01	-8,38E-02	-1,12E-01	3,92E-02	-1,38E-01	6,46E-02	-2,24E-01	-1,83E-01	-1,70E-01	-4,07E-02
-1,80E-02	-1,80E-01	-5,93E-02	-9,68E-02	1,73E-02	-1,08E-02	-7,70E-02	-1,36E-03	-1,07E-01	-2,85E-02
1,82E-02	-1,10E-01	-7,48E-02	-2,39E-01	-8,52E-02	-1,92E-01	-2,53E-02	1,03E-02	-7,45E-02	-1,19E-02
2,41E-02	-2,28E-01	-1,21E-01	-3,34E-01	-7,55E-02	-2,34E-01	-5,66E-02	2,68E-02	-1,34E-01	-3,94E-02
-1,32E-01	6,11E-02	-7,14E-02	1,65E-02	-2,21E-01	-5,10E-03	-9,90E-02	-1,30E-01	-9,64E-02	-3,71E-02
-1,67E-01	-6,19E-02	-1,22E-01	-9,25E-02	-2,87E-01	-3,36E-02	-1,39E-01	-1,34E-01	-2,10E-01	-7,91E-02
-5,03E-02	-9,10E-02	-1,03E-01	-1,14E-01	-9,64E-02	-8,99E-02	-1,18E-01	-8,05E-02	-9,59E-02	-2,55E-02
-1,56E-01	4,44E-02	-1,05E-01	1,27E-02	-2,41E-01	-2,40E-02	-1,70E-01	-1,91E-01	-1,18E-01	-2,51E-02
-1,02E-01	-1,19E-01	-1,25E-01	-4,97E-02	-9,46E-02	-3,11E-02	-1,91E-01	-1,29E-01	-1,38E-01	-3,42E-02
-5,45E-02	-1,46E-01	-7,90E-02	-1,04E-01	-6,65E-02	-3,64E-02	-1,01E-01	-4,77E-02	-1,31E-01	-3,61E-02

A* MATRIX BY ROWS

9,63E-01	-3,32E-01	-2,56E-01	6,82E-03	-1,50E-02	-7,87E-02	-2,15E-01	-1,71E-01	-8,03E-03	-4,64E-04
-1,95E-01	9,21E-01	-1,79E-01	-1,04E-02	-1,02E-01	8,11E-03	-4,19E-03	-6,65E-02	1,16E-02	-3,71E-02
-6,83E-02	-1,21E-01	1,16E 00	-5,53E-01	-3,29E-01	1,75E-03	1,55E-01	1,64E-01	-3,34E-01	7,92E-02
-1,60E-01	-9,76E-02	-1,47E-01	7,29E-01	-1,16E-01	-2,10E-01	-5,55E-02	1,41E-02	-2,26E-01	-6,51E-03
-1,02E-01	-8,54E-02	-7,01E-02	5,71E-02	9,66E-01	-2,29E-01	-1,37E-01	-6,17E-02	-6,82E-02	1,66E-02
-8,60E-02	-1,73E-01	-3,90E-01	1,54E-01	-4,59E-01	1,20E 00	-3,71E-01	-3,31E-01	-9,06E-02	-2,13E-01
-1,69E-01	9,28E-02	-6,48E-02	-1,52E-01	-2,00E-01	-1,00E-01	1,05E 00	-1,26E-01	-7,73E-04	-2,43E-01
-5,09E-02	-1,73E-01	-6,22E-03	-1,18E-01	-1,91E-01	-2,36E-02	-1,06E-01	8,31E-01	-2,56E-01	3,27E-02
-7,63E-03	-2,87E-02	-6,36E-02	-1,04E-01	1,47E-02	-3,08E-01	-2,65E-01	-9,00E-02	1,02E 00	-9,45E-02
2,49E-02	-1,04E-01	1,11E-04	-1,82E-01	-1,16E-02	3,04E-02	-8,93E-02	-2,94E-01	-1,94E-01	1,00E-00

A INVERSE*A

7,63E-01	-1,09E-01	-1,28E-01	1,21E-01	-1,52E-01	1,62E-01	-3,05E-01	-2,50E-01	-2,28E-01	-5,48E-02
-1,71E-02	7,29E-01	-6,61E-02	-1,12E-01	6,53E-02	2,47E-02	-9,69E-02	1,84E-02	-1,47E-01	-3,97E-02
7,93E-02	-1,19E-01	9,30E-01	-3,45E-01	-6,86E-02	-2,99E-01	2,09E-02	5,74E-02	-4,13E-02	1,06E-02
1,02E-01	-2,90E-01	-1,24E-01	5,33E-01	-2,46E-02	-3,45E-01	-7,30E-03	9,91E-02	-1,12E-01	-3,06E-02
-1,77E-01	1,33E-01	-7,32E-02	4,86E-02	6,85E-01	8,10E-03	-9,38E-02	-1,60E-01	-1,08E-01	-5,14E-02
-2,12E-01	-3,65E-02	-1,15E-01	-9,45E-02	-3,91E-01	9,95E-01	-1,06E-01	-1,32E-01	-2,60E-01	-1,14E-01
-3,80E-02	-1,02E-01	-1,21E-01	-1,32E-01	-8,14E-02	-1,16E-01	8,62E-01	-9,27E-02	-8,50E-02	-2,08E-02
-2,00E-01	1,14E-01	-1,15E-01	5,94E-02	-3,17E-01	-1,49E-02	-2,01E-01	7,47E-01	-1,22E-01	-1,95E-02
-1,25E-01	-1,54E-01	-1,52E-01	-1,36E-02	-6,81E-02	-4,63E-03	-2,57E-01	-1,66E-01	8,43E-01	-3,74E-02
-5,86E-02	-2,02E-01	-8,10E-02	-1,19E-01	-5,22E-02	-1,81E-02	-1,10E-01	-3,95E-02	-1,64E-01	9,54E-01

C MATRIX BY ROWS

-2.37E-01	-1.09E-01	-1.28E-01	1.21E-01	-1.52E-01	1.62E-01	-3.05E-01	-2.50E-01	-2.28E-01	-5.48E-02
-1.71E-02	-2.71E-01	-6.61E-02	-1.12E-01	6.53E-02	2.47E-02	-9.69E-02	1.84E-02	-1.47E-01	-3.97E-02
7.93E-02	-1.19E-01	-6.97E-02	-3.45E-01	-6.86E-02	-2.99E-01	2.09E-02	5.74E-02	-4.13E-02	1.06E-02
1.02E-01	-2.90E-01	-1.24E-01	-4.67E-01	-2.46E-02	-3.45E-01	-7.30E-03	9.91E-02	-1.12E-01	-3.06E-02
-1.77E-01	1.33E-01	-7.32E-02	4.86E-02	-3.15E-01	8.10E-03	-9.38E-02	-1.60E-01	-1.08E-01	-5.14E-02
-2.12E-01	-3.65E-02	-1.15E-01	-9.45E-02	-3.91E-01	-4.71E-03	-1.06E-01	-1.32E-01	-2.60E-01	-1.14E-01
-3.80E-02	-1.02E-01	-1.21E-01	-1.32E-01	-8.14E-02	-1.16E-01	-1.38E-01	-9.27E-02	-8.50E-02	-2.08E-02
-2.00E-01	1.14E-01	-1.15E-01	5.94E-02	-3.17E-01	-1.49E-02	-2.01E-01	-2.53E-01	-1.22E-01	-1.95E-02
-1.25E-01	-1.54E-01	-1.52E-01	-1.36E-02	-6.81E-02	-4.63E-03	-2.57E-01	-1.66E-01	-1.57E-01	-3.74E-02
-5.86E-02	-2.02E-01	-8.10E-02	-1.19E-01	-5.22E-02	-1.81E-02	-1.10E-01	-3.95E-02	-1.64E-01	-4.59E-02

A* MATRIX BY ROWS

1.14E 00	-3.50E-01	-2.29E-01	-2.57E-01	2.81E-02	-3.28E-01	-2.36E-02	1.33E-02	9.06E-02	2.41E-02
-2.41E-01	1.14E 00	-1.73E-01	5.48E-02	-2.56E-01	-4.14E-02	5.41E-03	-1.53E-01	7.21E-02	-1.66E-02
-1.78E-01	-1.79E-01	1.12E 00	-3.86E-01	-3.22E-01	1.94E-01	4.09E-02	8.80E-02	-4.23E-01	2.24E-02
-3.55E-01	1.69E-02	-1.67E-01	1.00E 00	-2.60E-01	1.83E-02	-2.02E-01	-1.74E-01	-3.08E-01	-3.49E-02
-3.16E-02	-2.63E-01	-7.51E-02	-1.95E-02	1.13E 00	-2.38E-01	-1.56E-01	-2.14E-03	-8.29E-02	2.76E-02
-2.52E-02	-1.84E-01	-4.30E-01	1.62E-01	-3.12E-01	1.11E 00	-4.85E-01	-4.00E-01	5.98E-03	-1.30E-01
-2.43E-01	1.44E-01	-3.66E-02	-9.75E-02	-3.09E-01	-3.01E-02	1.07E 00	-1.41E-01	-5.89E-02	-2.65E-01
4.02E-02	-3.74E-01	-9.84E-03	-2.44E-01	-2.17E-02	-5.26E-02	-6.91E-02	9.58E-01	-2.75E-01	1.29E-02
3.69E-02	3.28E-02	-1.32E-02	-2.34E-01	-9.29E-02	-3.91E-01	-1.04E-01	3.19E-03	1.03E 00	-1.06E-01
2.39E-02	1.68E-02	-1.65E-02	-1.56E-01	-5.87E-02	-3.10E-02	-1.02E-01	-3.41E-01	-1.27E-01	1.03E 00

A INVERSE*A

8.54E-01	-5.82E-02	-1.29E-01	1.67E-02	-1.42E-01	5.34E-03	-2.33E-01	-1.97E-01	-1.38E-01	-2.39E-02
4.04E-03	8.34E-01	-6.62E-02	-1.25E-01	2.40E-02	-6.17E-02	-7.39E-02	-1.02E-03	-8.11E-02	-1.72E-02
-1.06E-02	-1.42E-01	9.19E-01	-2.33E-01	-1.15E-01	-1.47E-01	-2.17E-02	1.98E-02	-1.22E-01	-4.74E-02
2.70E-03	-2.63E-01	-1.23E-01	6.51E-01	-1.07E-01	-2.09E-01	-5.01E-02	3.94E-02	-1.80E-01	-6.34E-02
-1.45E-01	4.62E-02	-8.53E-02	3.95E-02	7.96E-01	8.04E-03	-1.46E-01	-1.66E-01	-1.03E-01	-2.89E-02
-1.72E-01	-8.13E-02	-1.55E-01	-6.69E-02	-2.39E-01	9.54E-01	-2.24E-01	-1.91E-01	-1.98E-01	-5.52E-02
-6.24E-02	-9.87E-02	-9.76E-02	-1.33E-01	-1.29E-01	-9.09E-02	8.98E-01	-6.70E-02	-1.22E-01	-3.51E-02
-1.76E-01	3.98E-02	-1.17E-01	2.39E-02	-2.56E-01	-9.66E-03	-1.91E-01	7.92E-01	-1.36E-01	-3.60E-02
-9.67E-02	-1.07E-01	-1.21E-01	-8.83E-02	-1.29E-01	-5.92E-02	-1.70E-01	-1.23E-01	8.60E-01	-3.19E-02
-4.72E-02	-1.40E-01	-9.38E-02	-1.18E-01	-6.28E-02	-6.55E-02	-1.14E-01	-5.46E-02	-1.18E-01	9.70E-01

C MATRIX BY ROWS

-1.46E-01	-5.82E-02	-1.29E-01	1.67E-02	-1.42E-01	5.34E-03	-2.33E-01	-1.97E-01	-1.38E-01	-2.39E-02
4.04E-03	-1.66E-01	-6.62E-02	-1.25E-01	2.40E-02	-6.17E-02	-7.39E-02	-1.02E-03	-8.11E-02	-1.72E-02
-1.06E-02	-1.42E-01	-8.11E-02	-2.33E-01	-1.15E-01	-1.47E-01	-2.17E-02	1.98E-02	-1.22E-01	-4.74E-02
2.70E-03	-2.63E-01	-1.23E-01	-3.49E-01	-1.07E-01	-2.09E-01	-5.01E-02	3.94E-02	-1.80E-01	-6.34E-02
-1.45E-01	4.62E-02	-8.53E-02	3.95E-02	-2.04E-01	8.04E-03	-1.46E-01	-1.66E-01	-1.03E-01	-2.89E-02
-1.72E-01	-8.13E-02	-1.55E-01	-6.69E-02	-2.39E-01	-4.62E-02	-2.24E-01	-1.91E-01	-1.98E-01	-5.52E-02
-6.24E-02	-9.87E-02	-9.76E-02	-1.33E-01	-1.29E-01	-9.09E-02	-1.02E-01	-6.70E-02	-1.22E-01	-3.51E-02
-1.76E-01	3.98E-02	-1.17E-01	2.39E-02	-2.56E-01	-9.66E-03	-1.91E-01	-2.08E-01	-1.36E-01	-3.60E-02
-9.67E-02	-1.07E-01	-1.21E-01	-8.83E-02	-1.29E-01	-5.92E-02	-1.70E-01	-1.23E-01	-1.40E-01	-3.19E-02
-4.72E-02	-1.40E-01	-9.38E-02	-1.18E-01	-6.28E-02	-6.55E-02	-1.14E-01	-5.46E-02	-1.18E-01	-3.01E-02

A* MATRIX BY ROWS

1.02E 00	-2.40E-01	-2.66E-01	-3.59E-02	-2.95E-02	-2.03E-01	-1.95E-01	-1.81E-01	8.36E-02	4.41E-02
-1.34E-01	9.55E-01	-1.71E-01	-8.67E-02	-8.83E-02	-1.01E-01	4.32E-02	-3.43E-02	7.05E-02	-1.27E-02
-1.31E-01	-1.86E-01	1.15E 00	-4.87E-01	-3.44E-01	1.28E-01	1.43E-01	1.77E-01	-4.17E-01	7.79E-03
-1.90E-01	-1.67E-01	-1.32E-01	7.25E-01	-1.36E-01	-1.32E-01	-2.31E-02	6.16E-02	-3.02E-01	-5.15E-02
-1.34E-01	-1.09E-01	-8.19E-02	1.22E-01	9.97E-01	-1.69E-01	-2.11E-01	-1.21E-01	-8.68E-02	2.55E-02
-5.64E-02	-1.88E-01	-4.39E-01	2.11E-01	-3.10E-01	1.15E 00	-5.28E-01	-4.34E-01	-1.11E-02	-1.33E-01
-1.81E-01	8.48E-02	-2.52E-02	-1.97E-01	-2.65E-01	-9.09E-02	1.14E 00	-6.17E-02	-5.00E-02	-2.66E-01
-9.42E-02	-1.72E-01	-2.28E-02	-5.16E-02	-1.94E-01	3.78E-02	-1.54E-01	7.93E-01	-2.77E-01	1.42E-02
2.30E-02	3.03E-02	-2.67E-02	-1.95E-01	-7.25E-02	-3.70E-01	-1.55E-01	-3.88E-02	1.04E 00	-9.45E-02
6.45E-02	-7.83E-02	-2.13E-02	-2.04E-01	2.86E-02	-4.31E-02	-1.05E-01	-2.99E-01	-1.33E-01	1.03E 00

A INVERSE*A

8.13E-01	-5.80E-02	-1.50E-01	9.77E-02	-1.24E-01	6.03E-02	-3.20E-01	-2.69E-01	-1.47E-01	-1.40E-02
2.78E-02	7.61E-01	-7.49E-02	-1.46E-01	9.55E-02	-6.15E-02	-9.50E-02	1.50E-02	-8.64E-02	-1.22E-02
3.39E-02	-1.58E-01	9.35E-01	-3.23E-01	-1.22E-01	-2.07E-01	5.74E-02	9.31E-02	-1.16E-01	-5.67E-02
7.23E-02	-3.26E-01	-1.07E-01	5.26E-01	-7.32E-02	-2.83E-01	3.67E-02	1.41E-01	-1.76E-01	-7.17E-02
-1.89E-01	1.08E-01	-8.80E-02	9.63E-02	7.36E-01	3.76E-02	-1.67E-01	-2.12E-01	-1.09E-01	-3.28E-02
-2.06E-01	-6.31E-02	-1.62E-01	-2.41E-02	-2.65E-01	9.86E-01	-2.52E-01	-2.23E-01	-2.12E-01	-6.11E-02
-4.95E-02	-1.02E-01	-9.53E-02	-1.58E-01	-1.30E-01	-1.11E-01	9.15E-01	-5.25E-02	-1.18E-01	-3.43E-02
-2.23E-01	1.13E-01	-1.22E-01	8.60E-02	-3.23E-01	1.76E-02	-2.16E-01	7.37E-01	-1.37E-01	-3.69E-02
-1.02E-01	-1.21E-01	-1.30E-01	-7.12E-02	-1.10E-01	-4.73E-02	-2.02E-01	-1.44E-01	8.58E-01	-2.56E-02
-3.76E-02	-1.82E-01	-1.00E-01	-1.27E-01	-2.48E-02	-6.17E-02	-1.29E-01	-4.82E-02	-1.24E-01	9.71E-01

C MATRIX BY ROWS

-1,87E-01	-5,80E-02	-1,50E-01	9,77E-02	-1,24E-01	6,03E-02	-3,20E-01	-2,69E-01	-1,47E-01	-1,40E-02
2,78E-02	-2,39E-01	-7,49E-02	-1,46E-01	9.55E-02	-6,15E-02	-9,50E-02	1,50E-02	-8.64E-02	-1,22E-02
3,39E-02	-1,58E-01	-6,46E-02	-3,23E-01	-1,22E-01	-2,07E-01	5,74E-02	9,31E-02	-1,16E-01	-5,67E-02
7,23E-02	-3,26E-01	-1,07E-01	-4,74E-01	-7,32E-02	-2,83E-01	3,67E-02	1,41E-01	-1,76E-01	-7,17E-02
-1,89E-01	1,08E-01	-8,80E-02	9,63E-02	-2,64E-01	3,76E-02	-1,67E-01	-2,12E-01	-1,09E-01	-3,28E-02
-2,06E-01	-6,31E-02	-1,62E-01	-2,41E-02	-2,65E-01	-1,37E-02	-2,52E-01	-2,23E-01	-2,12E-01	-6,11E-02
-4,95E-02	-1,02E-01	-9,53E-02	-1,58E-01	-1,30E-01	-1,11E-01	-8,55E-02	-5,25E-02	-1,18E-01	-3,43E-02
-2,23E-01	1,13E-01	-1,22E-01	8,60E-02	-3,23E-01	1,76E-02	-2,16E-01	-2,63E-01	-1,37E-01	-3,69E-02
-1,02E-01	-1,21E-01	-1,30E-01	-7,12E-02	-1,10E-01	-4,73E-02	-2,02E-01	-1,44E-01	-1,42E-01	-2,56E-02
-3,76E-02	-1,82E-01	-1,00E-01	-1,27E-01	-2,48E-02	-6,17E-02	-1,29E-01	-4,82E-02	-1,24E-01	-2,86E-02

A* MATRIX BY ROWS

1,14E 00	-2,84E-01	-2,13E-01	-2,79E-01	-5,04E-02	-3,58E-01	3,44E-02	3,06E-02	9,81E-02	1,44E-02
-2,10E-01	1,14E 00	-1,57E-01	-1,15E-02	-2,72E-01	-8,47E-02	7,27E-02	-9,52E-02	7,57E-02	-2,63E-02
-1,88E-01	-2,24E-01	1,11E 00	-3,48E-01	-2,66E-01	2.31E-01	-2,29E-02	5,56E-02	-4.33E-01	3,12E-02
-3,41E-01	-5,10E-02	-1,76E-01	9,92E-01	-1,95E-01	2,96E-02	-2,31E-01	-1,66E-01	-3,18E-01	-3,18E-02
-5,29E-02	-2,48E-01	-8,57E-02	2,49E-02	1,13E 00	-2,14E-01	-1,99E-01	-4,47E-02	-8,14E-02	3,56E-02
-1,32E-02	-1,61E-01	-4,27E-01	1,42E-01	-3,28E-01	1,08E 00	-4.67E-01	-3,95E-01	2.15E-02	-1,24E-01
-2,43E-01	1,17E-01	-3,91E-02	-9,77E-02	-2,91E-01	-1,85E-02	1,07E 00	-1,35E-01	-6,98E-02	-2,70E-01
1,04E-02	-3,52E-01	-2,07E-02	-1,90E-01	-3,06E-02	-2,19E-02	-1,16E-01	9,09E-01	-2.77E-01	1,91E-02
3,77E-02	5,20E-02	-3,43E-03	-2,55E-01	-1,28E-01	-4,06E-01	-6,55E-02	2,59E-02	1.03E 00	-1,17E-01
4,36E-02	2,53E-02	-6,08E-03	-1,99E-01	-7,67E-02	-6,48E-02	-5,68E-02	-3,08E-01	-1,20E-01	1,02E 00

A INVERSE*A

8,62E-01	-2,18E-02	-1,17E-01	-1,87E-02	-1,90E-01	-2,89E-02	-1,83E-01	-1,72E-01	-1,30E-01	-3,03E-02
1,97E-02	8,47E-01	-5,53E-02	-1,65E-01	-1,89E-03	-9,32E-02	-2,76E-02	3,10E-02	-7,64E-02	-2,31E-02
-1,98E-02	-1,80E-01	9,06E-01	-2,08E-01	-7,58E-02	-1,19E-01	-6,68E-02	-9,45E-04	-1,34E-01	-4,41E-02
8,43E-04	-3,01E-01	-1,33E-01	6,59E-01	-7,28E-02	-1,93E-01	-7,91E-02	3,25E-02	-1,92E-01	-6,28E-02
-1,53E-01	5,09E-02	-9,23E-02	5,78E-02	7,99E-01	1,56E-02	-1,70E-01	-1,88E-01	-1,01E-01	-2,31E-02
-1,69E-01	-6,99E-02	-1,59E-01	-7,09E-02	-2,44E-01	9,40E-01	-2,30E-01	-2,01E-01	-1,88E-01	-4,81E-02
-6,85E-02	-1,10E-01	-1,01E-01	-1,27E-01	-1,25E-01	-8,06E-02	8,89E-01	-7,00E-02	-1,31E-01	-3,86E-02
-1,89E-01	4,31E-02	-1,24E-01	4,54E-02	-2,57E-01	3,87E-03	-2,14E-01	7,71E-01	-1,39E-01	-3,37E-02
-9,45E-02	-9,57E-02	-1,16E-01	-1,07E-01	-1,53E-01	-7,31E-02	-1,45E-01	-1,08E-01	8,58E-01	-3,85E-02
-3,77E-02	-1,32E-01	-8,86E-02	-1,43E-01	-7,83E-02	-8,66E-02	-8,87E-02	-3,80E-02	-1,14E-01	9,68E-01

C MATRIX BY ROWS

-1.38E-01	-2.18E-02	-1.17E-01	-1.87E-02	-1.90E-01	-2.89E-02	-1.83E-01	-1.72E-01	-1.30E-01	-3.03E-02
1.97E-02	-1.53E-01	-5.53E-02	-1.65E-01	-1.89E-03	-9.32E-02	-2.76E-02	3.10E-02	-7.64E-02	-2.31E-02
-1.98E-02	-1.80E-01	-9.35E-02	-2.08E-01	-7.58E-02	-1.19E-01	-6.68E-02	-9.45E-04	-1.34E-01	-4.41E-02
8.43E-04	-3.01E-01	-1.33E-01	-3.41E-01	-7.28E-02	-1.93E-01	-7.91E-02	3.25E-02	-1.92E-01	-6.28E-02
-1.53E-01	5.09E-02	-9.23E-02	5.78E-02	-2.01E-01	1.56E-02	-1.70E-01	-1.88E-01	-1.01E-01	-2.31E-02
-1.69E-01	-6.99E-02	-1.59E-01	-7.09E-02	-2.44E-01	-5.98E-02	-2.30E-01	-2.01E-01	-1.88E-01	-4.81E-02
-6.85E-02	-1.10E-01	-1.01E-01	-1.27E-01	-1.25E-01	-8.06E-02	-1.11E-01	-7.00E-02	-1.31E-01	-3.86E-02
-1.89E-01	4.31E-02	-1.24E-01	4.54E-02	-2.57E-01	3.87E-03	-2.14E-01	-2.29E-01	-1.39E-01	-3.37E-02
-9.45E-02	-9.57E-02	-1.16E-01	-1.07E-01	-1.53E-01	-7.31E-02	-1.45E-01	-1.08E-01	-1.42E-01	-3.85E-02
-3.77E-02	-1.32E-01	-8.86E-02	-1.43E-01	-7.83E-02	-8.66E-02	-8.87E-02	-3.80E-02	-1.14E-01	-3.23E-02

A* MATRIX BY ROWS

1.03E 00	-1.34E-01	-2.31E-01	-1.07E-01	-1.61E-01	-2.75E-01	-6.44E-02	-1.22E-01	1.01E-01	2.51E-02
-9.31E-02	9.75E-01	-1.42E-01	-1.87E-01	-1.40E-01	-1.72E-01	1.60E-01	5.35E-02	7.89E-02	-2.99E-02
-1.57E-01	-2.68E-01	1.11E 00	-4.03E-01	-2.39E-01	2.06E-01	1.40E-02	1.06E-01	-4.36E-01	2.49E-02
-1.88E-01	-2.62E-01	-1.52E-01	7.52E-01	-3.44E-02	-8.71E-02	-9.74E-02	4.39E-02	-3.20E-01	-4.40E-02
-1.57E-01	-1.06E-01	-9.98E-02	1.84E-01	1.02E 00	-1.35E-01	-2.82E-01	-1.81E-01	-8.32E-02	4.04E-02
-2.84E-02	-1.45E-01	-4.32E-01	1.70E-01	-3.34E-01	1.09E 00	-4.91E-01	-4.22E-01	2.28E-02	-1.20E-01
-1.90E-01	4.65E-02	-2.97E-02	-1.83E-01	-2.39E-01	-6.04E-02	1.12E 00	-6.00E-02	-7.05E-02	-2.75E-01
-1.28E-01	-1.61E-01	-3.91E-02	1.96E-02	-1.83E-01	8.21E-02	-2.25E-01	7.29E-01	-2.79E-01	2.54E-02
2.82E-02	6.77E-02	-5.45E-03	-2.39E-01	-1.39E-01	-4.00E-01	-7.54E-02	1.04E-02	1.03E 00	-1.15E-01
9.57E-02	-4.80E-02	-1.05E-03	-2.75E-01	-1.43E-02	-1.03E-01	-2.24E-02	-2.45E-01	-1.18E-01	1.02E 00

A INVERSE*A

8.38E-01	1.08E-02	-1.23E-01	2.42E-02	-2.10E-01	-9.28E-03	-2.13E-01	-2.12E-01	-1.28E-01	-2.49E-02
5.47E-02	7.98E-01	-5.26E-02	-2.15E-01	4.11E-02	-1.19E-01	-6.51E-03	7.16E-02	-7.40E-02	-2.22E-02
1.21E-02	-2.22E-01	9.14E-01	-2.62E-01	-4.85E-02	-1.44E-01	-3.12E-02	4.84E-02	-1.37E-01	-4.96E-02
6.14E-02	-3.83E-01	-1.22E-01	5.62E-01	-1.29E-02	-2.40E-01	-2.23E-02	1.18E-01	-1.93E-01	-6.91E-02
-1.96E-01	1.09E-01	-9.85E-02	1.24E-01	7.54E-01	4.90E-02	-2.06E-01	-2.45E-01	-1.02E-01	-2.09E-02
-1.92E-01	-4.28E-02	-1.64E-01	-3.26E-02	-2.62E-01	9.60E-01	-2.55E-01	-2.35E-01	-1.88E-01	-4.50E-02
-6.05E-02	-1.19E-01	-9.84E-02	-1.42E-01	-1.21E-01	-8.80E-02	9.00E-01	-5.66E-02	-1.31E-01	-4.04E-02
-2.38E-01	1.10E-01	-1.30E-01	1.19E-01	-3.11E-01	4.04E-02	-2.51E-01	7.08E-01	-1.40E-01	-3.18E-02
-9.47E-02	-9.45E-02	-1.16E-01	-1.05E-01	-1.52E-01	-7.32E-02	-1.48E-01	-1.11E-01	8.59E-01	-3.72E-02
-1.94E-02	-1.58E-01	-8.76E-02	-1.68E-01	-5.44E-02	-9.95E-02	-7.93E-02	-1.76E-02	-1.13E-01	9.69E-01

C MATRIX BY ROWS

-1,62E-01	1,08E-02	-1,23E-01	2,42E-02	-2,10E-01	-9,28E-03	-2,13E-01	-2,12E-01	-1,28E-01	-2,49E-02
5,47E-02	-2,02E-01	-5,26E-02	-2,15E-01	4,11E-02	-1,19E-01	-6,51E-03	7,16E-02	-7,40E-02	-2,22E-02
1,21E-02	-2,22E-01	-8,63E-02	-2,62E-01	-4,85E-02	-1,44E-01	-3,12E-02	4,84E-02	-1,37E-01	-4,96E-02
6,14E-02	-3,83E-01	-1,22E-01	-4,38E-01	-1,29E-02	-2,40E-01	-2,23E-02	1,18E-01	-1,93E-01	-6,91E-02
-1,96E-01	1,09E-01	-9,85E-02	1,24E-01	-2,46E-01	4,90E-02	-2,06E-01	-2.45E-01	-1,02E-01	-2,09E-02
-1,92E-01	-4,28E-02	-1,64E-01	-3,26E-02	-2,62E-01	-4,01E-02	-2.55E-01	-2,35E-01	-1,88E-01	-4,50E-02
-6,05E-02	-1,19E-01	-9,84E-02	-1,42E-01	-1,21E-01	-8,80E-02	-9,96E-02	-5,66E-02	-1,31E-01	-4,04E-02
-2,38E-01	1,10E-01	-1,30E-01	1,19E-01	-3,11E-01	4,04E-02	-2,51E-01	-2,92E-01	-1,40E-01	-3,18E-02
-9,47E-02	-9,45E-02	-1,16E-01	-1,05E-01	-1,52E-01	-7,32E-02	-1,48E-01	-1,11E-01	-1,41E-01	-3,72E-02
-1,94E-02	-1,58E-01	-8,76E-02	-1,68E-01	-5,44E-02	-9,95E-02	-7,93E-02	-1,76E-02	-1,13E-01	-3,14E-02

A* MATRIX BY ROWS

1,11E 00	-2,40E-01	-2,14E-01	-2,37E-01	-9,26E-02	-3,35E-01	2,05E-02	-1,70E-03	9,39E-02	1,13E-02
-1,80E-01	1,09E 00	-1,50E-01	-6,22E-02	-2,42E-01	-1,08E-01	1.04E-01	-4.89E-02	7.33E-02	-3,10E-02
-1,78E-01	-2,40E-01	1,10E 00	-3,58E-01	-2,47E-01	2.25E-01	-2.60E-02	6.02E-02	-4,29E-01	3,52E-02
-2,98E-01	-1,12E-01	-1,73E-01	9,32E-01	-1,41E-01	-1,51E-03	-2,06E-01	-1,16E-01	-3,15E-01	-3,06E-02
-8,04E-02	-2,08E-01	-8,99E-02	6,80E-02	1.10E 00	-1,94E-01	-2,22E-01	-8,30E-02	-8,02E-02	3,82E-02
-1,67E-02	-1,51E-01	-4,24E-01	1,41E-01	-3,42E-01	1,08E 00	-4,59E-01	-3,93E-01	2,01E-02	-1,28E-01
-2,29E-01	9,40E-02	-3,92E-02	-1,16E-01	-2,69E-01	-2,72E-02	1,07E 00	-1,20E-01	-6,88E-02	-2,69E-01
-2,68E-02	-3,00E-01	-2,67E-02	-1,32E-01	-6,97E-02	5,93E-03	-1,49E-01	8,57E-01	-2,76E-01	2,25E-02
3,34E-02	5,54E-02	-3,36E-03	-2,50E-01	-1,33E-01	-4,02E-01	-6,68E-02	2,32E-02	1,03E 00	-1,19E-01
5,72E-02	7,86E-03	-1,95E-03	-2,24E-01	-6,76E-02	-7,62E-02	-3,80E-02	-2,84E-01	-1,22E-01	1,02E 00

A INVERSE*A

8,54E-01	-9,64E-03	-1,15E-01	-1,23E-02	-2,07E-01	-2.43E-02	-1,78E-01	-1,74E-01	-1,34E-01	-3,39E-02
2,83E-02	8,36E-01	-5,21E-02	-1,83E-01	2,45E-03	-1,01E-01	-1,33E-02	4,81E-02	-7.86E-02	-2,65E-02
-1,02E-02	-1,95E-01	9,05E-01	-2,17E-01	-5,78E-02	-1.25E-01	-6.93E-02	4,17E-03	-1,32E-01	-4,09E-02
1,79E-02	-3,27E-01	-1,33E-01	6,37E-01	-4,81E-02	-2,04E-01	-7,34E-02	4,92E-02	-1,90E-01	-6,09E-02
-1,64E-01	6,80E-02	-9,37E-02	7,43E-02	7,86E-01	2,28E-02	-1,78E-01	-2,03E-01	-1,00E-01	-2,23E-02
-1,74E-01	-5,82E-02	-1,58E-01	-6,64E-02	-2,57E-01	9,42E-01	-2,27E-01	-2,04E-01	-1,89E-01	-4,96E-02
-6,67E-02	-1,15E-01	-1,02E-01	-1,28E-01	-1,19E-01	-8,08E-02	8,86E-01	-7,04E-02	-1,30E-01	-3,73E-02
-2,02E-01	6,11E-02	-1,26E-01	6,63E-02	-2,70E-01	1,37E-02	-2,27E-01	7,52E-01	-1,38E-01	-3,21E-02
-9,56E-02	-9,53E-02	-1,15E-01	-1,07E-01	-1,55E-01	-7,21E-02	-1,43E-01	-1,07E-01	8,57E-01	-3,98E-02
-3,31E-02	-1,37E-01	-8,65E-02	-1,53E-01	-7,73E-02	-9,10E-02	-7,97E-02	-2,80E-02	-1,15E-01	9,65E-01

C MATRIX BY ROWS

-1.46E-01	-9.64E-03	-1.15E-01	-1.23E-02	-2.07E-01	-2.43E-02	-1.78E-01	-1.74E-01	-1.34E-01	-3.39E-02
2.83E-02	-1.64E-01	-5.21E-02	-1.83E-01	2.45E-03	-1.01E-01	-1.33E-02	4.81E-02	-7.86E-02	-2.65E-02
-1.02E-02	-1.95E-01	-9.52E-02	-2.17E-01	-5.78E-02	-1.25E-01	-6.93E-02	4.17E-03	-1.32E-01	-4.09E-02
1.79E-02	-3.27E-01	-1.33E-01	-3.63E-01	-4.81E-02	-2.04E-01	-7.34E-02	4.92E-02	-1.90E-01	-6.09E-02
-1.64E-01	6.80E-02	-9.37E-02	7.43E-02	-2.14E-01	2.28E-02	-1.78E-01	-2.03E-01	-1.00E-01	-2.23E-02
-1.74E-01	-5.82E-02	-1.58E-01	-6.64E-02	-2.57E-01	-5.84E-02	-2.27E-01	-2.04E-01	-1.89E-01	-4.96E-02
-6.67E-02	-1.15E-01	-1.02E-01	-1.28E-01	-1.19E-01	-8.08E-02	-1.14E-01	-7.04E-02	-1.30E-01	-3.73E-02
-2.02E-01	6.11E-02	-1.26E-01	6.63E-02	-2.70E-01	1.37E-02	-2.27E-01	-2.48E-01	-1.38E-01	-3.21E-02
-9.56E-02	-9.53E-02	-1.15E-01	-1.07E-01	-1.55E-01	-7.21E-02	-1.43E-01	-1.07E-01	-1.43E-01	-3.98E-02
-3.31E-02	-1.37E-01	-8.65E-02	-1.53E-01	-7.73E-02	-9.10E-02	-7.97E-02	-2.80E-02	-1.15E-01	-3.45E-02

A* MATRIX BY ROWS

1.00E-00	-9.14E-02	-2.29E-01	-7.36E-02	-2.10E-01	-2.54E-01	-6.54E-02	-1.43E-01	9.33E-02	1.71E-02
-6.66E-02	9.38E-01	-1.35E-01	-2.35E-01	-1.19E-01	-1.93E-01	1.96E-01	1.00E-01	7.38E-02	-3.74E-02
-1.46E-01	-2.84E-01	1.11E 00	-4.07E-01	-2.11E-01	2.01E-01	-3.79E-04	1.03E-01	-4.29E-01	3.35E-02
-1.48E-01	-3.20E-01	-1.52E-01	7.02E-01	2.32E-02	-1.14E-01	-8.45E-02	8.21E-02	-3.15E-01	-3.89E-02
-1.81E-01	-6.88E-02	-1.04E-01	2.22E-01	9.93E-01	-1.18E-01	-3.04E-01	-2.16E-01	-8.07E-02	4.38E-02
-3.09E-02	-1.31E-01	-4.26E-01	1.63E-01	-3.58E-01	1.09E 00	-4.70E-01	-4.11E-01	2.00E-02	-1.27E-01
-1.78E-01	2.26E-02	-3.21E-02	-1.95E-01	-2.13E-01	-6.59E-02	1.11E 00	-5.24E-02	-6.85E-02	-2.71E-01
-1.61E-01	-1.15E-01	-4.54E-02	7.34E-02	-2.16E-01	1.07E-01	-2.57E-01	6.80E-01	-2.77E-01	3.00E-02
2.28E-02	7.00E-02	-4.80E-03	-2.34E-01	-1.45E-01	-3.94E-01	-7.52E-02	9.33E-03	1.03E 00	-1.18E-01
1.07E-01	-6.15E-02	5.10E-03	-3.01E-01	-1.31E-02	-1.14E-01	2.73E-03	-2.18E-01	-1.22E-01	1.01E 00

A INVERSE*A

8.30E-01	2.47E-02	-1.18E-01	2.54E-02	-2.34E-01	-5.76E-03	-1.98E-01	-2.06E-01	-1.34E-01	-3.26E-02
6.16E-02	7.90E-01	-4.74E-02	-2.34E-01	3.86E-02	-1.26E-01	1.38E-02	9.23E-02	-7.85E-02	-2.84E-02
2.15E-02	-2.39E-01	9.09E-01	-2.65E-01	-2.30E-02	-1.48E-01	-4.40E-02	4.58E-02	-1.31E-01	-4.25E-02
7.74E-02	-4.09E-01	-1.25E-01	5.46E-01	1.69E-02	-2.49E-01	-2.58E-02	1.27E-01	-1.89E-01	-6.41E-02
-2.05E-01	1.25E-01	-9.94E-02	1.38E-01	7.41E-01	5.39E-02	-2.11E-01	-2.57E-01	-1.01E-01	-2.00E-02
-1.95E-01	-2.83E-02	-1.61E-01	-3.36E-02	-2.80E-01	9.58E-01	-2.44E-01	-2.32E-01	-1.89E-01	-4.84E-02
-5.90E-02	-1.25E-01	-1.01E-01	-1.40E-01	-1.11E-01	-8.64E-02	8.92E-01	-6.03E-02	-1.30E-01	-3.77E-02
-2.50E-01	1.26E-01	-1.33E-01	1.39E-01	-3.21E-01	4.92E-02	-2.65E-01	6.89E-01	-1.39E-01	-2.94E-02
-9.65E-02	-9.40E-02	-1.15E-01	-1.06E-01	-1.56E-01	-7.14E-02	-1.44E-01	-1.08E-01	8.56E-01	-3.98E-02
-1.55E-02	-1.61E-01	-8.40E-02	-1.80E-01	-5.83E-02	-1.04E-01	-6.53E-02	-4.65E-03	-1.15E-01	9.64E-01

C MATRIX BY ROWS

-1,70E-01	2,47E-02	-1,18E-01	2,54E-02	-2,34E-01	-5,76E-03	-1,98E-01	-2,06E-01	-1,34E-01	-3,26E-02
6,16E-02	-2,10E-01	-4,74E-02	-2,34E-01	3,86E-02	-1,26E-01	1,38E-02	9,23E-02	-7,85E-02	-2,84E-02
2,15E-02	-2,39E-01	-9,08E-02	-2,65E-01	-2,30E-02	-1,48E-01	-4,40E-02	4,58E-02	-1,31E-01	-4,25E-02
7,74E-02	-4,09E-01	-1,25E-01	-4,54E-01	1,69E-02	-2,49E-01	-2,58E-02	1,27E-01	-1,89E-01	-6,41E-02
-2,05E-01	1,25E-01	-9,94E-02	1,38E-01	-2,59E-01	5,39E-02	-2,11E-01	-2,57E-01	-1,01E-01	-2,00E-02
-1,95E-01	-2,83E-02	-1,61E-01	-3,36E-02	-2,80E-01	-4,24E-02	-2,44E-01	-2,32E-01	-1,89E-01	-4,84E-02
-5,90E-02	-1,25E-01	-1,01E-01	-1,40E-01	-1,11E-01	-8,64E-02	-1,08E-01	-6,03E-02	-1,30E-01	-3,77E-02
-2,50E-01	1,26E-01	-1,33E-01	1,39E-01	-3,21E-01	4,92E-02	-2,65E-01	-3,11E-01	-1,39E-01	-2,94E-02
-9,65E-02	-9,40E-02	-1,15E-01	-1,06E-01	-1,56E-01	-7,14E-02	-1,44E-01	-1,08E-01	-1,44E-01	-3,98E-02
-1,55E-02	-1,61E-01	-8,40E-02	-1,80E-01	-5,83E-02	-1,04E-01	-6,53E-02	-4,65E-03	-1,15E-01	-3,55E-02

A* MATRIX BY ROWS

1,06E 00	-1,80E-01	-2,20E-01	-1,71E-01	-1,40E-01	-3,02E-01	-1,48E-02	-5,92E-02	9,38E-02	1,39E-02
-1,34E-01	1,03E 00	-1,44E-01	-1,32E-01	-1,92E-01	-1,42E-01	1,41E-01	1,13E-02	7,35E-02	-3,35E-02
-1,65E-01	-2,57E-01	1,11E 00	-3,78E-01	-2,33E-01	2,15E-01	-1,51E-02	7,77E-02	-4,29E-01	3,44E-02
-2,37E-01	-1,96E-01	-1,65E-01	8,38E-01	-7,49E-02	-4,74E-02	-1,56E-01	-3,56E-02	-3,15E-01	-3,41E-02
-1,21E-01	-1,52E-01	-9,56E-02	1,30E-01	1,06E 00	-1,63E-01	-2,55E-01	-1,37E-01	-8,04E-02	4,04E-02
-2,25E-02	-1,43E-01	-4,25E-01	1,50E-01	-3,48E-01	1,08E 00	-4,63E-01	-4,01E-01	2,00E-02	-1,27E-01
-2,08E-01	6,52E-02	-3,62E-02	-1,48E-01	-2,47E-01	-4,30E-02	1,09E 00	-9,26E-02	-6,87E-02	-2,70E-01
-8,11E-02	-2,25E-01	-3,42E-02	-4,88E-02	-1,29E-01	4,67E-02	-1,92E-01	7,85E-01	-2,77E-01	2,55E-02
2,91E-02	6,13E-02	-4,00E-03	-2,43E-01	-1,38E-01	-3,98E-01	-7,04E-02	1,74E-02	1,03E 00	-1,18E-01
7,75E-02	-2,04E-02	8,09E-04	-2,55E-01	-4,52E-02	-9,14E-02	-2,19E-02	-2,57E-01	-1,22E-01	1,02E 00

A INVERSE*A

8,44E-01	4,10E-03	-1,16E-01	3,25E-03	-2,17E-01	-1,66E-02	-1,87E-01	-1,87E-01	-1,34E-01	-3,32E-02
4,18E-02	8,17E-01	-5,03E-02	-2,03E-01	1,74E-02	-1,11E-01	-2,68E-03	6,58E-02	-7,85E-02	-2,72E-02
2,65E-03	-2,13E-01	9,07E-01	-2,37E-01	-4,41E-02	-1,34E-01	-5,86E-02	2,13E-02	-1,32E-01	-4,17E-02
4,20E-02	-3,60E-01	-1,29E-01	6,00E-01	-2,20E-02	-2,23E-01	-5,38E-02	8,12E-02	-1,90E-01	-6,23E-02
-1,81E-01	9,12E-02	-9,60E-02	1,00E-01	7,68E-01	3,54E-02	-1,92E-01	-2,25E-01	-1,01E-01	-2,14E-02
-1,83E-01	-4,62E-02	-1,59E-01	-5,29E-02	-2,66E-01	9,48E-01	-2,34E-01	-2,16E-01	-1,89E-01	-4,91E-02
-6,36E-02	-1,19E-01	-1,01E-01	-1,33E-01	-1,16E-01	-8,31E-02	8,89E-01	-6,62E-02	-1,30E-01	-3,75E-02
-2,22E-01	8,76E-02	-1,29E-01	9,56E-02	-2,91E-01	2,81E-02	-2,42E-01	7,26E-01	-1,39E-01	-3,10E-02
-9,59E-02	-9,48E-02	-1,15E-01	-1,06E-01	-1,56E-01	-7,18E-02	-1,43E-01	-1,07E-01	8,57E-01	-3,98E-02
-2,60E-02	-1,47E-01	-8,55E-02	-1,64E-01	-6,94E-02	-9,63E-02	-7,41E-02	-1,87E-02	-1,15E-01	9,65E-01

C MATRIX BY ROWS

-1.56E-01	4.10E-03	-1.16E-01	3.25E-03	-2.17E-01	-1.66E-02	-1.87E-01	-1.87E-01	-1.34E-01	-3.32E-02
4.18E-02	-1.83E-01	-5.03E-02	-2.03E-01	1.74E-02	-1.11E-01	-2.68E-03	6.58E-02	-7.85E-02	-2.72E-02
2.65E-03	-2.13E-01	-9.33E-02	-2.37E-01	-4.41E-02	-1.34E-01	-5.86E-02	2.13E-02	-1.32E-01	-4.17E-02
4.20E-02	-3.60E-01	-1.29E-01	-4.00E-01	-2.20E-02	-2.23E-01	-5.38E-02	8.12E-02	-1.90E-01	-6.23E-02
-1.81E-01	9.12E-02	-9.60E-02	1.00E-01	-2.32E-01	3.54E-02	-1.92E-01	-2.25E-01	-1.01E-01	-2.14E-02
-1.83E-01	-4.62E-02	-1.59E-01	-5.29E-02	-2.66E-01	-5.18E-02	-2.34E-01	-2.16E-01	-1.89E-01	-4.91E-02
-6.36E-02	-1.19E-01	-1.01E-01	-1.33E-01	-1.16E-01	-8.31E-02	-1.11E-01	-6.62E-02	-1.30E-01	-3.75E-02
-2.22E-01	8.76E-02	-1.29E-01	9.56E-02	-2.91E-01	2.81E-02	-2.42E-01	-2.74E-01	-1.39E-01	-3.10E-02
-9.59E-02	-9.48E-02	-1.15E-01	-1.06E-01	-1.56E-01	-7.18E-02	-1.43E-01	-1.07E-01	-1.43E-01	-3.98E-02
-2.60E-02	-1.47E-01	-8.55E-02	-1.64E-01	-6.94E-02	-9.63E-02	-7.41E-02	-1.87E-02	-1.15E-01	-3.49E-02

A* MATRIX BY ROWS

9.67E-01	-4.73E-02	-2.33E-01	-2.42E-02	-2.44E-01	-2.30E-01	-9.21E-02	-1.86E-01	9.33E-02	1.92E-02
-3.28E-02	8.91E-01	-1.30E-01	-2.87E-01	-8.21E-02	-2.18E-01	2.22E-01	1.45E-01	7.41E-02	-3.91E-02
-1.36E-01	-2.97E-01	1.11E 00	-4.22E-01	-2.02E-01	1.93E-01	8.20E-03	1.16E-01	-4.29E-01	3.28E-02
-1.03E-01	-3.82E-01	-1.46E-01	6.32E-01	7.19E-02	-1.49E-01	-4.75E-02	1.42E-01	-3.14E-01	-4.16E-02
-2.12E-01	-2.69E-02	-1.08E-01	2.69E-01	9.60E-01	-9.55E-02	-3.28E-01	-2.56E-01	-8.09E-02	4.55E-02
-3.53E-02	-1.25E-01	-4.27E-01	1.70E-01	-3.62E-01	1.09E 00	-4.74E-01	-4.17E-01	2.00E-02	-1.27E-01
-1.62E-01	1.37E-03	-2.98E-02	-2.19E-01	-1.96E-01	-7.77E-02	1.13E 00	-3.17E-02	-6.85E-02	-2.72E-01
-2.01E-01	-5.90E-02	-5.09E-02	1.35E-01	-2.60E-01	1.37E-01	-2.89E-01	6.27E-01	-2.77E-01	3.22E-02
1.97E-02	7.43E-02	-5.31E-03	-2.29E-01	-1.48E-01	-3.91E-01	-7.80E-02	4.97E-03	1.03E 00	-1.18E-01
1.22E-01	-8.25E-02	7.06E-03	-3.24E-01	3.74E-03	-1.25E-01	1.44E-02	-1.98E-01	-1.22E-01	1.01E 00

A INVERSE*A

8.22E-01	3.47E-02	-1.19E-01	3.71E-02	-2.41E-01	1.17E-05	-2.05E-01	-2.17E-01	-1.34E-01	-3.20E-02
7.16E-02	7.76E-01	-4.61E-02	-2.49E-01	4.99E-02	-1.33E-01	2.14E-02	1.05E-01	-7.84E-02	-2.88E-02
3.10E-02	-2.52E-01	9.11E-01	-2.80E-01	-1.32E-02	-1.56E-01	-3.57E-02	5.87E-02	-1.31E-01	-4.32E-02
9.52E-02	-4.33E-01	-1.22E-01	5.19E-01	3.59E-02	-2.63E-01	-1.09E-02	1.51E-01	-1.89E-01	-6.52E-02
-2.18E-01	1.42E-01	-1.01E-01	1.57E-01	7.27E-01	6.33E-02	-2.21E-01	-2.74E-01	-1.01E-01	-1.93E-02
-2.02E-01	-1.96E-02	-1.62E-01	-2.35E-02	-2.87E-01	9.63E-01	-2.50E-01	-2.41E-01	-1.89E-01	-4.80E-02
-5.67E-02	-1.28E-01	-1.00E-01	-1.43E-01	-1.08E-01	-8.83E-02	8.94E-01	-5.72E-02	-1.30E-01	-3.79E-02
-2.64E-01	1.46E-01	-1.35E-01	1.60E-01	-3.37E-01	5.98E-02	-2.76E-01	6.71E-01	-1.39E-01	-2.87E-02
-9.68E-02	-9.37E-02	-1.15E-01	-1.05E-01	-1.57E-01	-7.12E-02	-1.44E-01	-1.08E-01	8.57E-01	-3.97E-02
-1.02E-02	-1.69E-01	-8.33E-02	-1.88E-01	-5.23E-02	-1.08E-01	-6.14E-02	2.09E-03	-1.15E-01	9.64E-01

C MATRIX BY ROWS

-1.78E-01	3.47E-02	-1.19E-01	3.71E-02	-2.41E-01	1.17E-05	-2.05E-01	-2.17E-01	-1.34E-01	-3.20E-02
7.16E-02	-2.24E-01	-4.61E-02	-2.49E-01	4.99E-02	-1.33E-01	2.14E-02	1.05E-01	-7.84E-02	-2.88E-02
3.10E-02	-2.52E-01	-8.93E-02	-2.80E-01	-1.32E-02	-1.56E-01	-3.57E-02	5.87E-02	-1.31E-01	-4.32E-02
9.52E-02	-4.33E-01	-1.22E-01	-4.81E-01	3.59E-02	-2.63E-01	-1.09E-02	1.51E-01	-1.89E-01	-6.52E-02
-2.18E-01	1.42E-01	-1.01E-01	1.57E-01	-2.73E-01	6.33E-02	-2.21E-01	-2.74E-01	-1.01E-01	-1.93E-02
-2.02E-01	-1.96E-02	-1.62E-01	-2.35E-02	-2.87E-01	-3.73E-02	-2.50E-01	-2.41E-01	-1.89E-01	-4.80E-02
-5.67E-02	-1.28E-01	-1.00E-01	-1.43E-01	-1.08E-01	-8.83E-02	-1.06E-01	-5.72E-02	-1.30E-01	-3.79E-02
-2.64E-01	1.46E-01	-1.35E-01	1.60E-01	-3.37E-01	5.98E-02	-2.76E-01	-3.29E-01	-1.39E-01	-2.87E-02
-9.68E-02	-9.37E-02	-1.15E-01	-1.05E-01	-1.57E-01	-7.12E-02	-1.44E-01	-1.08E-01	-1.43E-01	-3.97E-02
-1.02E-02	-1.69E-01	-8.33E-02	-1.88E-01	-5.23E-02	-1.08E-01	-6.14E-02	2.09E-03	-1.15E-01	-3.58E-02

A* MATRIX BY ROWS

1.01E 00	-1.03E-01	-2.28E-01	-8.61E-02	-2.00E-01	-2.61E-01	-5.94E-02	-1.32E-01	9.35E-02	1.69E-02
-7.55E-02	9.50E-01	-1.36E-01	-2.21E-01	-1.29E-01	-1.86E-01	1.88E-01	8.82E-02	7.39E-02	-3.67E-02
-1.48E-01	-2.81E-01	1.11E 00	-4.03E-01	-2.15E-01	2.02E-01	-1.66E-03	9.97E-02	-4.29E-01	3.34E-02
-1.60E-01	-3.04E-01	-1.54E-01	7.19E-01	9.79E-03	-1.06E-01	-9.35E-02	6.69E-02	-3.15E-01	-3.84E-02
-1.73E-01	-7.97E-02	-1.03E-01	2.10E-01	1.00E 00	-1.24E-01	-2.97E-01	-2.06E-01	-8.07E-02	4.33E-02
-2.99E-02	-1.33E-01	-4.26E-01	1.61E-01	-3.56E-01	1.09E 00	-4.69E-01	-4.10E-01	2.00E-02	-1.27E-01
-1.82E-01	2.84E-02	-3.25E-02	-1.89E-01	-2.18E-01	-6.30E-02	1.11E 00	-5.75E-02	-6.86E-02	-2.71E-01
-1.50E-01	-1.29E-01	-4.39E-02	5.71E-02	-2.04E-01	9.87E-02	-2.48E-01	6.94E-01	-2.77E-01	2.93E-02
2.37E-02	6.88E-02	-4.75E-03	-2.35E-01	-1.44E-01	-3.94E-01	-7.48E-02	1.03E-02	1.03E 00	-1.18E-01
1.03E-01	-5.62E-02	4.41E-03	-2.95E-01	-1.70E-02	-1.11E-01	-9.60E-04	-2.23E-01	-1.22E-01	1.01E 00

A INVERSE*A

8.31E-01	2.18E-02	-1.18E-01	2.28E-02	-2.31E-01	-7.03E-03	-1.97E-01	-2.04E-01	-1.34E-01	-3.25E-02
5.90E-02	7.93E-01	-4.79E-02	-2.29E-01	3.62E-02	-1.24E-01	1.12E-02	8.85E-02	-7.84E-02	-2.81E-02
1.90E-02	-2.35E-01	9.09E-01	-2.62E-01	-2.63E-02	-1.47E-01	-4.54E-02	4.29E-02	-1.31E-01	-4.26E-02
7.27E-02	-4.02E-01	-1.25E-01	5.53E-01	1.14E-02	-2.46E-01	-2.90E-02	1.22E-01	-1.89E-01	-6.40E-02
-2.02E-01	1.21E-01	-9.90E-02	1.33E-01	7.44E-01	5.15E-02	-2.09E-01	-2.53E-01	-1.01E-01	-2.02E-02
-1.94E-01	-3.08E-02	-1.61E-01	-3.59E-02	-2.78E-01	9.57E-01	-2.43E-01	-2.30E-01	-1.89E-01	-4.85E-02
-5.96E-02	-1.24E-01	-1.01E-01	-1.39E-01	-1.11E-01	-8.61E-02	8.92E-01	-6.10E-02	-1.30E-01	-3.77E-02
-2.46E-01	1.21E-01	-1.32E-01	1.33E-01	-3.17E-01	4.64E-02	-2.62E-01	6.94E-01	-1.39E-01	-2.97E-02
-9.64E-02	-9.41E-02	-1.15E-01	-1.06E-01	-1.56E-01	-7.14E-02	-1.44E-01	-1.08E-01	8.57E-01	-3.98E-02
-1.69E-02	-1.60E-01	-8.43E-02	-1.78E-01	-5.95E-02	-1.03E-01	-6.68E-02	-6.69E-03	-1.15E-01	9.65E-01

C MATRIX BY ROWS

-1,69E-01	2,18E-02	-1,18E-01	2,28E-02	-2,31E-01	-7,03E-03	-1,97E-01	-2,04E-01	-1,34E-01	-3,25E-02
5,90E-02	-2,07E-01	-4,79E-02	-2,29E-01	3,62E-02	-1.24E-01	1.12E-02	8,85E-02	-7,84E-02	-2,81E-02
1,90E-02	-2,35E-01	-9,10E-02	-2,62E-01	-2.63E-02	-1.47E-01	-4,54E-02	4,29E-02	-1,31E-01	-4,26E-02
7,27E-02	-4,02E-01	-1,25E-01	-4,47E-01	1,14E-02	-2,46E-01	-2,90E-02	1,22E-01	-1,89E-01	-6,40E-02
-2.02E-01	1.21E-01	-9,90E-02	1,33E-01	-2,56E-01	5.15E-02	-2,09E-01	-2,53E-01	-1,01E-01	-2,02E-02
-1,94E-01	-3,08E-02	-1,61E-01	-3,59E-02	-2,78E-01	-4,34E-02	-2,43E-01	-2,30E-01	-1,89E-01	-4,85E-02
-5,96E-02	-1,24E-01	-1,01E-01	-1,39E-01	-1,11E-01	-8,61E-02	-1,08E-01	-6,10E-02	-1,30E-01	-3,77E-02
-2,46E-01	1,21E-01	-1,32E-01	1,33E-01	-3,17E-01	4,64E-02	-2,62E-01	-3,06E-01	-1,39E-01	-2,97E-02
-9,64E-02	-9,41E-02	-1,15E-01	-1,06E-01	-1,56E-01	-7,14E-02	-1,44E-01	-1,08E-01	-1,43E-01	-3,98E-02
-1,69E-02	-1,60E-01	-8,43E-02	-1,78E-01	-5,95E-02	-1,03E-01	-6,68E-02	-6,69E-03	-1,15E-01	-3,54E-02

A* MATRIX BY ROWS

9,39E-01	-8,00E-03	-2,37E-01	1,94E-02	-2,75E-01	-2,09E-01	-1,15E-01	-2,23E-01	9,31E-02	2,08E-02
-2,72E-03	8.49E-01	-1,26E-01	-3,32E-01	-4,94E-02	-2,41E-01	2,47E-01	1,84E-01	7,42E-02	-4,08E-02
-1,28E-01	-3,09E-01	1.11E 00	-4,35E-01	-1,92E-01	1,87E-01	1,51E-02	1,27E-01	-4,29E-01	3,23E-02
-6,25E-02	-4,38E-01	-1,40E-01	5,71E-01	1,16E-01	-1,79E-01	-1,52E-02	1,95E-01	-3,14E-01	-4,38E-02
-2,39E-01	1,02E-02	-1,12E-01	3,10E-01	9,31E-01	-7.53E-02	-3,50E-01	-2,91E-01	-8,10E-02	4,70E-02
-3,91E-02	-1,20E-01	-4,27E-01	1,75E-01	-3,66E-01	1.10E 00	-4,77E-01	-4,22E-01	1,99E-02	-1,26E-01
-1,48E-01	-1,76E-02	-2,79E-02	-2,40E-01	-1,81E-01	-8,80E-02	1,14E 00	-1,36E-02	-6,84E-02	-2,73E-01
-2,37E-01	-9,65E-03	-5,59E-02	1,89E-01	-2,99E-01	1,64E-01	-3,18E-01	5,80E-01	-2,77E-01	3,41E-02
1,69E-02	7,82E-02	-5,70E-03	-2,25E-01	-1,51E-01	-3,89E-01	-8,02E-02	1,26E-03	1,03E 00	-1,18E-01
1,36E-01	-1,01E-01	8,92E-03	-3,44E-01	1,83E-02	-1,35E-01	2,51E-02	-1,81E-01	-1,22E-01	1,01E 00

A INVERSE*A

8,15E-01	4,38E-02	-1,20E-01	4,72E-02	-2,49E-01	4,96E-03	-2,10E-01	-2,25E-01	-1,34E-01	-3,16E-02
8,05E-02	7,64E-01	-4,49E-02	-2,62E-01	5.96E-02	-1.40E-01	2,85E-02	1.17E-01	-7,83E-02	-2,93E-02
3,94E-02	-2,64E-01	9.12E-01	-2,93E-01	-4.01E-03	-1.62E-01	-2.89E-02	6.98E-02	-1.31E-01	-4,37E-02
1,11E-01	-4,55E-01	-1,20E-01	4,94E-01	5,32E-02	-2,74E-01	1,84E-03	1,72E-01	-1,89E-01	-6,61E-02
-2,29E-01	1,58E-01	-1,03E-01	1,73E-01	7,15E-01	7,15E-02	-2,30E-01	-2,88E-01	-1,01E-01	-1,87E-02
-2,08E-01	-1,17E-02	-1,63E-01	-1,47E-02	-2,94E-01	9,67E-01	-2,54E-01	-2,49E-01	-1,89E-01	-4,77E-02
-5,47E-02	-1,31E-01	-1,00E-01	-1,47E-01	-1,06E-01	-8,98E-02	8,96E-01	-5,45E-02	-1,30E-01	-3,80E-02
-2,76E-01	1,63E-01	-1,36E-01	1,79E-01	-3,50E-01	6,92E-02	-2,86E-01	6,54E-01	-1,39E-01	-2,80E-02
-9,70E-02	-9,33E-02	-1,15E-01	-1,05E-01	-1,57E-01	-7,10E-02	-1,44E-01	-1,09E-01	8.57E-01	-3,97E-02
-5,56E-03	-1,75E-01	-8,27E-02	-1,95E-01	-4,72E-02	-1,12E-01	-5,76E-02	8,27E-03	-1,15E-01	9,64E-01

C MATRIX BY ROWS

-1.85E-01	4.38E-02	-1.20E-01	4.72E-02	-2.49E-01	4.96E-03	-2.10E-01	-2.25E-01	-1.34E-01	-3.16E-02
8.05E-02	-2.36E-01	-4.49E-02	-2.62E-01	5.96E-02	-1.40E-01	2.85E-02	1.17E-01	-7.83E-02	-2.93E-02
3.94E-02	-2.64E-01	-8.82E-02	-2.93E-01	-4.01E-03	-1.62E-01	-2.89E-02	6.98E-02	-1.31E-01	-4.37E-02
1.11E-01	-4.55E-01	-1.20E-01	-5.06E-01	5.32E-02	-2.74E-01	1.84E-03	1.72E-01	-1.89E-01	-6.61E-02
-2.29E-01	1.58E-01	-1.03E-01	1.73E-01	-2.85E-01	7.15E-02	-2.30E-01	-2.88E-01	-1.01E-01	-1.87E-02
-2.08E-01	-1.17E-02	-1.63E-01	-1.47E-02	-2.94E-01	-3.30E-02	-2.54E-01	-2.49E-01	-1.89E-01	-4.77E-02
-5.47E-02	-1.31E-01	-1.00E-01	-1.47E-01	-1.06E-01	-8.98E-02	-1.04E-01	-5.45E-02	-1.30E-01	-3.80E-02
-2.76E-01	1.63E-01	-1.36E-01	1.79E-01	-3.50E-01	6.92E-02	-2.86E-01	-3.46E-01	-1.39E-01	-2.80E-02
-9.70E-02	-9.33E-02	-1.15E-01	-1.05E-01	-1.57E-01	-7.10E-02	-1.44E-01	-1.09E-01	-1.43E-01	-3.97E-02
-5.56E-03	-1.75E-01	-8.27E-02	-1.95E-01	-4.72E-02	-1.12E-01	-5.76E-02	8.27E-03	-1.15E-01	-3.60E-02

A* MATRIX BY ROWS

9.55E-01	-3.02E-02	-2.35E-01	-5.19E-03	-2.57E-01	-2.21E-01	-1.02E-01	-2.02E-01	9.32E-02	1.99E-02
-1.97E-02	8.73E-01	-1.28E-01	-3.07E-01	-6.78E-02	-2.28E-01	2.33E-01	1.62E-01	7.42E-02	-3.98E-02
-1.32E-01	-3.03E-01	1.11E 00	-4.28E-01	-1.97E-01	1.90E-01	1.12E-02	1.21E-01	-4.29E-01	3.25E-02
-8.51E-02	-4.06E-01	-1.43E-01	6.06E-01	9.09E-02	-1.62E-01	-3.34E-02	1.65E-01	-3.14E-01	-4.25E-02
-2.23E-01	-1.07E-02	-1.10E-01	2.86E-01	9.47E-01	-8.67E-02	-3.37E-01	-2.71E-01	-8.10E-02	4.61E-02
-3.69E-02	-1.23E-01	-4.27E-01	1.72E-01	-3.64E-01	1.09E 00	-4.75E-01	-4.20E-01	2.00E-02	-1.27E-01
-1.56E-01	-6.90E-03	-2.90E-02	-2.28E-01	-1.90E-01	-8.22E-02	1.13E 00	-2.38E-02	-6.84E-02	-2.73E-01
-2.17E-01	-3.75E-02	-5.31E-02	1.59E-01	-2.77E-01	1.49E-01	-3.02E-01	6.07E-01	-2.77E-01	3.30E-02
1.84E-02	7.60E-02	-5.48E-03	-2.27E-01	-1.49E-01	-3.90E-01	-7.90E-02	3.36E-03	1.03E 00	-1.18E-01
1.28E-01	-9.05E-02	7.87E-03	-3.33E-01	1.01E-02	-1.30E-01	1.91E-02	-1.90E-01	-1.22E-01	1.01E 00

A INVERSE*A

8.19E-01	3.87E-02	-1.20E-01	4.15E-02	-2.44E-01	2.17E-03	-2.07E-01	-2.20E-01	-1.34E-01	-3.18E-02
7.55E-02	7.70E-01	-4.56E-02	-2.55E-01	5.41E-02	-1.36E-01	2.45E-02	1.10E-01	-7.83E-02	-2.91E-02
3.47E-02	-2.57E-01	9.11E-01	-2.86E-01	-9.19E-03	-1.58E-01	-3.28E-02	6.36E-02	-1.31E-01	-4.35E-02
1.02E-01	-4.43E-01	-1.21E-01	5.08E-01	4.35E-02	-2.68E-01	-5.35E-03	1.60E-01	-1.89E-01	-6.56E-02
-2.22E-01	1.49E-01	-1.02E-01	1.64E-01	7.22E-01	6.69E-02	-2.25E-01	-2.80E-01	-1.01E-01	-1.90E-02
-2.05E-01	-1.61E-02	-1.62E-01	-1.96E-02	-2.90E-01	9.65E-01	-2.52E-01	-2.44E-01	-1.89E-01	-4.79E-02
-5.58E-02	-1.30E-01	-1.00E-01	-1.45E-01	-1.07E-01	-8.90E-02	8.95E-01	-5.60E-02	-1.30E-01	-3.79E-02
-2.69E-01	1.54E-01	-1.35E-01	1.69E-01	-3.43E-01	6.39E-02	-2.81E-01	6.63E-01	-1.39E-01	-2.84E-02
-9.69E-02	-9.35E-02	-1.15E-01	-1.05E-01	-1.57E-01	-7.11E-02	-1.44E-01	-1.08E-01	8.57E-01	-3.97E-02
-8.20E-03	-1.72E-01	-8.31E-02	-1.91E-01	-5.00E-02	-1.10E-01	-5.97E-02	4.78E-03	-1.15E-01	9.64E-01

A MATRIX BY ROWS

1,00E 00	1,30E-01	3,18E-01	2,70E-01	2,77E-01	6,86E-02	1,64E-01	3,04E-01	1,88E-01	8,17E-02	0	0
2,80E-03	1,00E 00	9,74E-02	2,99E-01	3,10E-01	2,15E-01	1,38E-01	3,00E-01	1,05E-01	1,19E-01	4,91E-02	0
2,12E-01	2,74E-01	1,00E 00	3,40E-01	1,25E-01	3,61E-01	2,40E-01	1,80E-01	5,43E-02	8,43E-02	2,79E-01	3,72E-01
2,29E-01	1,94E-01	3,09E-01	1,00E 00	2,91E-01	7,12E-02	1,66E-01	2,84E-01	3,63E-01	1,52E-01	2,38E-01	3,91E-01
7,89E-02	3,08E-01	3,75E-01	1,83E-01	1,00E 00	1,73E-01	1,08E-01	1,41E-01	2,48E-02	2,25E-01	2,25E-01	1,13E-01
3,07E-01	1,70E-01	2,56E-01	1,60E-01	2,11E-01	1,00E 00	1,48E-01	8,69E-02	3,12E-01	5,30E-03	5,32E-02	1,29E-01
7,93E-02	3,31E-01	3,90E-01	3,42E-01	2,02E-01	2,45E-02	1,00E 00	3,34E-01	3,41E-01	3,53E-01	3,22E-02	2,93E-01
1,61E-01	3,26E-01	3,73E-01	3,55E-01	1,36E-01	2,90E-01	7,73E-02	1,00E 00	2,54E-01	6,67E-02	2,21E-01	3,72E-01
1,06E-02	3,21E-01	3,02E-01	2,60E-01	2,67E-01	3,29E-01	2,86E-01	2,52E-02	1,00E 00	2,95E-01	1,00E-01	1,10E-01
1,50E-01	2,73E-01	3,03E-01	2,73E-01	8,43E-02	3,40E-01	2,89E-01	1,26E-01	1,53E-01	1,00E 00	4.80E-03	1,61E-01
0	1,38E-01	3,30E-01	7,89E-02	2,89E-01	5,91E-02	3,68E-01	1,49E-01	9,97E-02	1,60E-01	1,00E 00	3,39E-01
0	0	5,81E-02	1,27E-02	3,56E-02	3,04E-01	3.97E-02	3,84E-01	1,73E-01	1,37E-01	2.51E-02	1.00E 00

A* MATRIX BY ROWS

1,00E 00	-1,30E-01	0	0	0	0	0	0	0	0	0	0
-2,80E-03	1,00E 00	0	0	0	0	0	0	0	0	0	0
0	0	1,12E 00	-3,81E-01	0	0	0	0	0	0	0	0
0	0	-3,46E-01	1.12E 00	0	0	0	0	0	0	0	0
0	0	0	0	1,04E 00	-1,80E-01	0	0	0	0	0	0
0	0	0	0	-2,19E-01	1,04E 00	0	0	0	0	0	0
0	0	0	0	0	0	1,03E 00	-3,43E-01	0	0	0	0
0	0	0	0	0	0	-7,93E-02	1,03E 00	0	0	0	0
0	0	0	0	0	0	0	0	1,05E 00	-3,09E-01	0	0
0	0	0	0	0	0	0	0	-1,60E-01	1,05E 00	0	0
0	0	0	0	0	0	0	0	0	0	1,01E 00	-3,42E-01
0	0	0	0	0	0	0	0	0	0	-2,53E-02	1,01E 00

C MATRIX BY ROWS

0	0	2,62E-01	1,81E-01	2,72E-01	2,14E-02	1,44E-01	2,56E-01	1,84E-01	2,74E-02	0	0
0	0	5,60E-03	2,97E-01	2,74E-01	1,68E-01	1,18E-01	2,60E-01	9,14E-02	9,24E-02	4,95E-02	-1,68E-02
2,11E-01	2,46E-01	0	0	5,09E-02	3,52E-01	2,32E-01	1,02E-01	4,34E-02	7,15E-02	2,72E-01	2,80E-01
2,28E-01	1,64E-01	0	0	2,87E-01	2,15E-02	1,47E-01	2,34E-01	3,56E-01	4,68E-02	2,30E-01	3,13E-01
7,81E-02	2,98E-01	3,56E-01	6,15E-02	0	0	1,00E-01	1,08E-01	-1,01E-02	2,28E-01	2,24E-01	3,73E-02
3,06E-01	1,30E-01	2,31E-01	8,12E-02	0	0	1,45E-01	3,84E-02	3,26E-01	-9,08E-02	5,04E-02	1,12E-01
7,84E-02	3,21E-01	3,17E-01	2,35E-01	2,04E-01	-1,08E-02	0	0	3,01E-01	2,65E-01	2,51E-02	2,85E-01
1,61E-01	3,05E-01	2,94E-01	2,55E-01	7,80E-02	2,77E-01	0	0	2,55E-01	-8,57E-03	2,13E-01	3,00E-01
9,71E-03	3,19E-01	2,48E-01	1,76E-01	2,05E-01	2,94E-01	2,92E-01	-7,23E-02	0	0	9,81E-02	7,65E-02
1,50E-01	2,53E-01	2,44E-01	1,90E-01	1,32E-02	3,38E-01	2,86E-01	3,07E-02	0	0	7,60E-04	1,61E-01
-3,85E-04	1,38E-01	3,41E-01	-3,73E-02	2,87E-01	9,30E-03	3,66E-01	2,70E-02	7,88E-02	1,36E-01	0	0
0	0	6,05E-02	-7,92E-03	-2,95E-02	3,09E-01	1,03E-02	3,81E-01	1,59E-01	9,01E-02	0	0

A* MATRIX BY ROWS

1,00E 00	-1,30E-01	-2,62E-01	-1,42E-01	-2,37E-01	4,77E-04	-1,29E-01	-2,22E-01	-1,72E-01	-1,54E-02	6,45E-03	-2,19E-03
-2,80E-03	1,00E 00	-4,87E-03	-2,96E-01	-2,74E-01	-1,68E-01	-1,17E-01	-2,60E-01	-9,09E-02	-9,23E-02	-4,95E-02	1,68E-02
-1,49E-01	-2,13E-01	1,12E 00	-3,81E-01	5,23E-02	-3,85E-01	-2,03E-01	-2,52E-02	8,69E-02	-6,21E-02	-2,16E-01	-1,94E-01
-1,82E-01	-9,83E-02	-3,46E-01	1,12E 00	-3,03E-01	9,76E-02	-8,46E-02	-2,27E-01	-3,83E-01	-2,75E-02	-1,64E-01	-2,53E-01
-2,60E-02	-2,86E-01	-3,28E-01	-4,92E-02	1,04E 00	-1,80E-01	-7,78E-02	-1,05E-01	6,91E-02	-2,53E-01	-2,24E-01	-1,86E-02
-3,01E-01	-7,02E-02	-1,62E-01	-7,08E-02	-2,19E-01	1,04E 00	-1,29E-01	-1,63E-02	-3,41E-01	1,44E-01	-3,24E-03	-1,08E-01
-2,55E-02	-2,25E-01	-2,25E-01	-1,53E-01	-1,83E-01	1,06E-01	1,03E 00	-3,43E-01	-2,21E-01	-2,75E-01	4,74E-02	-1,89E-01
-1,59E-01	-2,88E-01	-2,77E-01	-2,43E-01	-6,39E-02	-2,85E-01	-7,93E-02	1,03E 00	-2,38E-01	2,98E-02	-2,17E-01	-2,85E-01
3,60E-02	-2,56E-01	-1,84E-01	-1,26E-01	-2,10E-01	-2,03E-01	-2,17E-01	8,51E-02	1,05E 00	-3,09E-01	-1,02E-01	-3,05E-02
-1,55E-01	-2,14E-01	-2,16E-01	-1,71E-01	1,91E-02	-3,06E-01	-2,53E-01	-4,37E-02	-1,60E-01	1,05E 00	1,49E-02	-1,56E-01
3,88E-04	-1,39E-01	-3,23E-01	3,49E-02	-3,00E-01	9,62E-02	-3,65E-01	1,03E-01	-2,52E-02	-1,07E-01	1,01E 00	-3,42E-01
-9,75E-06	3,48E-03	-5,24E-02	7,04E-03	3,70E-02	-3,11E-01	-1,11E-03	-3,83E-01	-1,58E-01	-8,74E-02	-2,53E-02	1,01E 00

A INVERSE*A

8,17E-01	-3,68E-01	-2,75E-01	-1,55E-01	-1,53E-01	-2,29E-01	-1,80E-01	-8,70E-02	-1,88E-01	-1,23E-01	-2,51E-01	-2,79E-01
-2,08E-01	6,70E-01	-3,11E-01	-1,56E-01	-1,64E-01	-1,32E-01	-1,68E-01	-9,74E-02	-2,61E-01	-9,57E-02	-2,07E-01	-2,57E-01
-1,57E-01	-2,36E-01	6,02E-01	-2,32E-01	-2,60E-01	-1,97E-01	-2,51E-01	-2,50E-01	-3,37E-01	-1,31E-01	-7,33E-02	-1,49E-01
-8,85E-02	-3,64E-01	-4,81E-01	7,36E-01	-2,86E-01	-3,15E-01	-2,89E-01	-2,34E-01	-2,33E-01	-1,82E-01	-1,62E-01	-1,57E-01
-1,48E-01	-2,48E-01	-2,18E-01	-1,86E-01	7,68E-01	-2,95E-01	-2,83E-01	-1,76E-01	-1,60E-01	-1,18E-01	-1,50E-01	-2,10E-01
-7,45E-02	-2,17E-01	-2,21E-01	-1,75E-01	-2,64E-01	7,79E-01	-2,14E-01	-1,72E-01	-1,82E-01	-9,58E-02	-1,32E-01	-1,51E-01
-1,76E-01	-3,42E-01	-2,57E-01	-2,21E-01	-2,57E-01	-4,38E-01	6,48E-01	-3,08E-01	-1,82E-01	-1,42E-01	-2,31E-01	-2,29E-01
-2,12E-01	-2,82E-01	-2,88E-01	-1,80E-01	-3,20E-01	-3,30E-01	-3,66E-01	6,69E-01	-3,15E-01	-1,14E-01	-2,10E-01	-2,09E-01
-2,10E-01	-2,74E-01	-2,54E-01	-1,79E-01	-2,33E-01	-1,46E-01	-2,22E-01	-2,17E-01	7,13E-01	-1,74E-01	-1,76E-01	-2,21E-01
-2,27E-01	-2,41E-01	-2,33E-01	-2,04E-01	-2,33E-01	-1,91E-01	-1,88E-01	-2,49E-01	-3,58E-01	8,84E-01	-1,56E-01	-2,52E-01
-1,43E-01	-3,50E-01	-2,82E-01	-1,92E-01	-1,39E-01	-2,15E-01	-1,82E-01	-9,18E-02	-1,31E-01	-1,97E-01	8,21E-01	-2,33E-01
-1,80E-01	-2,38E-01	-2,37E-01	-1,68E-01	-6,63E-02	-2,03E-01	-1,27E-01	-4,32E-03	-2,01E-01	3,14E-02	-1,21E-01	8,08E-01

C MATRIX BY ROWS

-1,83E-01	-3,68E-01	-2,75E-01	-1,55E-01	-1,53E-01	-2,29E-01	-1,80E-01	-8,70E-02	-1,88E-01	-1,23E-01	-2,51E-01	-2,79E-01
-2,08E-01	-3,30E-01	-3,11E-01	-1,56E-01	-1,64E-01	-1,32E-01	-1,68E-01	-9,74E-02	-2,61E-01	-9,57E-02	-2,07E-01	-2,57E-01
-1,57E-01	-2,36E-01	-3,98E-01	-2,32E-01	-2,60E-01	-1,97E-01	-2,51E-01	-2,50E-01	-3,37E-01	-1,31E-01	-7,33E-02	-1,49E-01
-8,85E-02	-3,64E-01	-4,81E-01	-2,64E-01	-2,86E-01	-3,15E-01	-2,89E-01	-2,34E-01	-2,33E-01	-1,82E-01	-1,62E-01	-1,57E-01
-1,48E-01	-2,48E-01	-2,18E-01	-1,86E-01	-2,32E-01	-2,95E-01	-2,83E-01	-1,76E-01	-1,60E-01	-1,18E-01	-1,50E-01	-2,10E-01
-7,45E-02	-2,17E-01	-2,21E-01	-1,75E-01	-2,64E-01	-2,21E-01	-2,14E-01	-1,72E-01	-1,82E-01	-9,58E-02	-1,32E-01	-1,51E-01
-1,76E-01	-3,42E-01	-2,57E-01	-2,21E-01	-2,57E-01	-4,38E-01	-3,52E-01	-3,08E-01	-1,82E-01	-1,42E-01	-2,31E-01	-2,29E-01
-2,12E-01	-2,82E-01	-2,88E-01	-1,80E-01	-3,20E-01	-3,30E-01	-3,66E-01	-3,31E-01	-3,15E-01	-1,14E-01	-2.10E-01	-2.09E-01
-2,10E-01	-2,74E-01	-2,54E-01	-1,79E-01	-2,33E-01	-1,46E-01	-2,22E-01	-2,17E-01	-2,87E-01	-1,74E-01	-1,76E-01	-2,21E-01
-2,27E-01	-2,41E-01	-2,33E-01	-2,04E-01	-2,33E-01	-1,91E-01	-1,88E-01	-2,49E-01	-3,58E-01	-1,16E-01	-1,56E-01	-2,52E-01
-1,43E-01	-3,50E-01	-2,82E-01	-1,92E-01	-1,39E-01	-2,15E-01	-1,82E-01	-9,18E-02	-1,31E-01	-1,97E-01	-1,79E-01	-2,33E-01
-1,80E-01	-2,38E-01	-2,37E-01	-1,68E-01	-6,63E-02	-2,03E-01	-1.27E-01	-4.32E-03	-2,01E-01	3,14E-02	-1.21E-01	-1.92E-01

A* MATRIX BY ROWS

1,04E 00	-1.27E-01	-1,29E-01	-3,31E-02	-5,74E-02	1,12E-01	5,37E-02	-1,96E-03	-1,96E-02	3,56E-02	-3,19E-02	-1,97E-02
-9,95E-03	1.06E 00	8,51E-02	-1,78E-01	-8,20E-02	8,73E-02	9,61E-02	-4,00E-02	-4,07E-02	-1,86E-03	-2,56E-02	2,38E-02
-9,63E-02	4,72E-02	1,20E 00	-3,05E-01	1,15E-01	-1,72E-01	-1,07E-01	-3,65E-02	5,36E-02	-9,72E-03	-3,31E-03	-2,07E-02
8,30E-02	5,17E-02	-3,24E-01	1,19E 00	-2,15E-01	1,96E-01	5,83E-02	-1,32E-01	-1,57E-01	4,94E-03	-2.18E-02	-7,42E-03
6,77E-02	-1,24E-01	-1,05E-01	4,81E-02	1,12E 00	-1,63E-01	-4,23E-02	-6,20E-03	2,88E-01	-1,91E-01	-1,49E-01	7,13E-02
-1,59E-01	9,16E-02	-2,31E-02	-1,65E-02	-2,30E-01	1,11E 00	-4,80E-02	1,72E-02	-2,52E-01	2,08E-01	9.08E-02	1,16E-02
1,22E-01	-1,10E-01	1,78E-02	-5,29E-02	-5,70E-02	4,13E-02	1,08E 00	-3,02E-01	7,83E-02	-2,33E-01	8,66E-02	-6,44E-02
-5,27E-02	3,68E-02	6,81E-02	-2,44E-02	2,84E-02	-1,68E-01	-8,70E-03	1,01E 00	-8,63E-02	1,58E-01	-9,77E-02	-7,71E-02
5,97E-02	-1,19E-01	-1,67E-02	-7,04E-03	-1,15E-01	6,39E-03	-1,02E-01	1,52E-01	1,11E 00	-3,03E-01	-4,82E-02	5,57E-02
-1,37E-01	1,15E-02	3,19E-02	-6,54E-02	1,40E-01	-1,07E-01	-6,50E-02	-5,93E-04	-1,49E-01	1,11E 00	1.28E-01	-9.23E-02
1,03E-01	-1,19E-01	-2,32E-01	1,14E-01	-1,85E-01	2,37E-01	-2,30E-01	2,45E-01	1,59E-01	-1,84E-01	1.03E 00	-2,91E-01
-1.89E-02	1,22E-02	-3,64E-02	1,52E-02	2,38E-01	-2,79E-01	1,34E-01	-1,44E-01	-9,40E-02	6,15E-02	1.73E-02	1,00E 00

A INVERSE*A

1,04E 00	-1,69E-02	1,67E-01	1,58E-01	1,95E-01	1,01E-01	1,83E-01	2,29E-01	1,96E-01	3,84E-02	-9,12E-02	-3,57E-02
-8,97E-03	1,04E 00	8,07E-02	1.42E-01	1,59E-01	2,74E-01	1,96E-01	2,06E-01	4.47E-02	9,13E-02	-1.55E-02	-7,30E-03
1,35E-01	2,91E-01	1,00E 00	6,01E-02	9,87E-02	2,57E-01	1,60E-01	4,39E-02	-9,52E-03	7,16E-02	2,96E-01	2,50E-01
3,22E-01	1,40E-01	-4,73E-02	1,07E 00	1,30E-01	1,10E-01	1,67E-01	1,40E-01	2,84E-01	1,38E-02	1.69E-01	3.04E-01
9,58E-02	2,03E-01	2,58E-01	9,46E-02	1,07E 00	1,56E-02	1,59E-02	9,82E-02	2,37E-01	4,96E-02	1,09E-01	8,10E-02
1,96E-01	1,72E-01	1,70E-01	6,13E-02	-5,01E-02	1,08E 00	8,99E-02	6,26E-02	1,31E-01	6,53E-02	8,81E-02	1,33E-01
1,54E-01	2,20E-01	3,79E-01	1,59E-01	1,87E-01	-9,21E-02	1,06E 00	-2,32E-02	3,58E-01	8,82E-02	7,35E-02	1,91E-01
1,00E-01	3,47E-01	3,19E-01	2,45E-01	6,89E-02	1,31E-01	4,47E-02	9,51E-01	1,06E-01	1,57E-01	1,24E-01	2,42E-01
2,71E-02	2,06E-01	2,40E-01	1,39E-01	9,41E-02	3,27E-01	1,66E-01	4,51E-02	1,05E 00	-3,42E-02	9,20E-02	1,11E-01
-3,13E-03	2,86E-01	2,97E-01	9,63E-02	1,08E-01	2,47E-01	2,48E-01	-1,28E-02	-8,39E-02	1,09E 00	1,40E-01	5,34E-02
1,02E-01	-2,49E-02	1,25E-01	6,72E-02	2,11E-01	1,06E-01	1,58E-01	2,21E-01	2,98E-01	-1,24E-01	1,03E 00	2,25E-02
-9,08E-02	2,69E-02	4,08E-02	-9,40E-03	2,16E-01	-2,48E-02	1,20E-01	2,64E-01	-1,39E-02	2,64E-01	4,01E-02	9,66E-01

C MATRIX BY ROWS

4,46E-02	-1,69E-02	1,67E-01	1,58E-01	1,95E-01	1,01E-01	1,83E-01	2,29E-01	1,96E-01	3,84E-02	-9,12E-02	-3,57E-02
-8,97E-03	3,82E-02	8,07E-02	1,42E-01	1,59E-01	2,74E-01	1,96E-01	2,06E-01	4,47E-02	9,13E-02	-1,55E-02	-7,30E-03
1,35E-01	2,91E-01	1,52E-04	6,01E-02	9,87E-02	2,57E-01	1,60E-01	4,39E-02	-9,52E-03	7,16E-02	2,96E-01	2,50E-01
3,22E-01	1,40E-01	-4,73E-02	7,43E-02	1,30E-01	1,10E-01	1,67E-01	1,40E-01	2,84E-01	1,38E-02	1,69E-01	3,04E-01
9,58E-02	2,03E-01	2,58E-01	9,46E-02	6,97E-02	1,56E-02	1,59E-02	9,82E-02	2,37E-01	4,96E-02	1,09E-01	8,10E-02
1,96E-01	1,72E-01	1,70E-01	6,13E-02	-5,01E-02	8,43E-02	8,99E-02	6,26E-02	1,31E-01	6,53E-02	8,81E-02	1,33E-01
1,54E-01	2,20E-01	3,79E-01	1,59E-01	1,87E-01	-9,21E-02	5,51E-02	-2,32E-02	3,58E-01	8,82E-02	7,35E-02	1,91E-01
1,00E-01	3,47E-01	3,19E-01	2,45E-01	6,89E-02	1,31E-01	4,47E-02	-4,86E-02	1,06E-01	1,57E-01	1,24E-01	2,42E-01
2,71E-02	2,06E-01	2,40E-01	1,39E-01	9,41E-02	3,27E-01	1,66E-01	4,51E-02	4,95E-02	-3,42E-02	9,20E-02	1,11E-01
-3,13E-03	2,86E-01	2,97E-01	9,63E-02	1,08E-01	2,47E-01	2,48E-01	-1,28E-02	-8,39E-02	8,56E-02	1,40E-01	5,34E-02
1,02E-01	-2,49E-02	1,25E-01	6,72E-02	2,11E-01	1,06E-01	1,58E-01	2,21E-01	2,98E-01	-1,24E-01	2,75E-02	2,25E-02
-9,08E-02	2,69E-02	4,08E-02	-9,40E-03	2,16E-01	-2,48E-02	1,20E-01	2,64E-01	-1,39E-02	2,64E-01	4,01E-02	-3,42E-02

A* MATRIX BY ROWS

1,00E 00	-8,77E-02	-3,20E-01	-1,78E-01	-2,14E-01	7,56E-02	-9,57E-02	-1,91E-01	-2,17E-01	5,60E-03	9,62E-02	3,93E-02
3,17E-02	1,02E 00	-1,20E-02	-3,14E-01	-2,35E-01	-1,78E-01	-9,50E-02	-2,31E-01	-4,70E-02	-1,16E-01	-2,21E-03	5,65E-02
-1,15E-01	-2,27E-01	1,24E 00	-3,27E-01	5,48E-02	-4,56E-01	-2,22E-01	-3,50E-02	2,03E-01	-6,33E-02	-3,01E-01	-1,93E-01
-2,68E-01	5,18E-02	-2,04E-01	1,16E 00	-3,19E-01	1,87E-01	-9,71E-02	-2,97E-01	-4,84E-01	1,07E-02	-8,70E-02	-2,56E-01
6,72E-03	-2,93E-01	-3,45E-01	-4,14E-02	1,07E 00	-1,51E-01	-7,80E-03	-1,01E-01	5,14E-02	-2,27E-01	-2,24E-01	8,56E-03
-3,34E-01	-5,16E-02	-1,35E-01	-3,56E-02	-1,50E-01	1,04E 00	-1,50E-01	-1,82E-02	-2,93E-01	1,30E-01	6,76E-03	-9,14E-02
-2,59E-02	-1,74E-01	-2,59E-01	-1,43E-01	-2,20E-01	2,18E-01	1,07E 00	-2,97E-01	-3,21E-01	-2,25E-01	8,61E-02	-1,84E-01
-1,15E-01	-3,34E-01	-2,35E-01	-2,58E-01	-2,04E-02	-3,09E-01	-4,30E-02	1,11E 00	-1,13E-01	-3,64E-03	-2,38E-01	-3,10E-01
4,96E-02	-2,61E-01	-1,71E-01	-1,31E-01	-1,62E-01	-2,72E-01	-1,95E-01	1,23E-01	1,09E 00	-2,60E-01	-9,84E-02	-5,01E-02
-1,10E-01	-2,69E-01	-2,49E-01	-1,34E-01	5,35E-02	-3,38E-01	-2,86E-01	4,48E-02	-3,86E-02	1,06E 00	-2,61E-02	-1,19E-01
-6,18E-02	-4,55E-02	-3,18E-01	2,32E-02	-2,78E-01	1,13E-01	-3,33E-01	8,87E-02	-1,57E-01	3,94E-02	1,07E 00	-3,37E-01
9,94E-02	1,52E-02	-9,15E-02	4,14E-02	-2,20E-02	-1,83E-01	3,62E-02	-4,16E-01	-1,30E-01	-1,91E-01	-1,03E-02	1,08E 00

A INVERSE*A

8,36E-01	-2,99E-01	-2,54E-01	-1,62E-01	-9,71E-02	-1,50E-01	-1,14E-01	-2,51E-02	-1,80E-01	-8,11E-02	-1,64E-01	-2,31E-01
-1,76E-01	7,25E-01	-2,59E-01	-1,47E-01	-8,82E-02	-1,16E-01	-1,17E-01	-4,30E-02	-1,95E-01	-9,26E-02	-1,46E-01	-2,10E-01
-1,18E-01	-1,50E-01	7,47E-01	-1,52E-01	-2,31E-01	-1,54E-01	-2,20E-01	-2,49E-01	-2,54E-01	-1,11E-01	-7,14E-02	-9,56E-02
-1,02E-01	-1,94E-01	-3,28E-01	7,97E-01	-2,64E-01	-1,88E-01	-2,32E-01	-2,50E-01	-2,70E-01	-1,24E-01	-6,55E-02	-1,15E-01
-9,97E-02	-2,12E-01	-1,75E-01	-1,45E-01	8,29E-01	-2,55E-01	-2,01E-01	-1,47E-01	-1,26E-01	-6,73E-02	-1,38E-01	-1,52E-01
-8,20E-02	-1,54E-01	-1,67E-01	-1,30E-01	-1,70E-01	8,11E-01	-1,89E-01	-1,51E-01	-1,25E-01	-8,23E-02	-8,56E-02	-1,08E-01
-1,13E-01	-2,67E-01	-2,11E-01	-1,67E-01	-2,49E-01	-3,19E-01	7,29E-01	-2,14E-01	-1,61E-01	-9,66E-02	-1,90E-01	-1,84E-01
-1,50E-01	-2,39E-01	-1,72E-01	-1,48E-01	-2,47E-01	-2,96E-01	-2,97E-01	7,47E-01	-1,71E-01	-1,29E-01	-1,83E-01	-1,83E-01
-1,80E-01	-2,25E-01	-1,90E-01	-1,34E-01	-1,49E-01	-1,70E-01	-1,77E-01	-1,55E-01	7,88E-01	-1,00E-01	-1,52E-01	-1,96E-01
-1,71E-01	-2,31E-01	-2,03E-01	-1,32E-01	-1,70E-01	-1,70E-01	-1,92E-01	-1,46E-01	-2,12E-01	9,03E-01	-1,61E-01	-1,84E-01
-1,40E-01	-2,41E-01	-2,54E-01	-1,62E-01	-1,16E-01	-1,39E-01	-1,02E-01	-7,31E-02	-2,14E-01	-5,93E-02	8,78E-01	-1,90E-01
-6,49E-02	-2,41E-01	-2,48E-01	-1,20E-01	-7,47E-02	-9,84E-02	-7,87E-02	1,49E-02	-8,89E-02	-7,20E-02	-1,17E-01	8,74E-01

C MATRIX BY ROWS

-1,64E-01	-2,99E-01	-2,54E-01	-1,62E-01	-9,71E-02	-1,50E-01	-1,14E-01	-2,51E-02	-1,80E-01	-8,11E-02	-1,64E-01	-2,31E-01
-1,76E-01	-2,75E-01	-2,59E-01	-1,47E-01	-8,82E-02	-1,16E-01	-1,17E-01	-4,30E-02	-1,95E-01	-9,26E-02	-1,46E-01	-2.10E-01
-1,18E-01	-1,50E-01	-2,53E-01	-1,52E-01	-2,31E-01	-1,54E-01	-2,20E-01	-2,49E-01	-2,54E-01	-1,11E-01	-7,14E-02	-9,56E-02
-1,02E-01	-1,94E-01	-3,28E-01	-2,03E-01	-2,64E-01	-1,88E-01	-2,32E-01	-2,50E-01	-2,70E-01	-1,24E-01	-6.55E-02	-1.15E-01
-9,97E-02	-2,12E-01	-1,75E-01	-1,45E-01	-1,71E-01	-2,55E-01	-2,01E-01	-1,47E-01	-1,26E-01	-6,73E-02	-1,38E-01	-1,52E-01
-8,20E-02	-1,54E-01	-1,67E-01	-1,30E-01	-1,70E-01	-1,89E-01	-1,89E-01	-1,51E-01	-1,25E-01	-8,23E-02	-8.56E-02	-1.08E-01
-1,13E-01	-2,67E-01	-2,11E-01	-1,67E-01	-2,49E-01	-3,19E-01	-2,71E-01	-2,14E-01	-1,61E-01	-9,66E-02	-1,90E-01	-1,84E-01
-1,50E-01	-2,39E-01	-1,72E-01	-1,48E-01	-2,47E-01	-2,96E-01	-2,97E-01	-2,53E-01	-1,71E-01	-1,29E-01	-1,83E-01	-1,83E-01
-1,80E-01	-2,25E-01	-1,90E-01	-1,34E-01	-1,49E-01	-1,70E-01	-1,77E-01	-1,55E-01	-2,12E-01	-1,00E-01	-1,52E-01	-1,96E-01
-1,71E-01	-2,31E-01	-2,03E-01	-1,32E-01	-1,70E-01	-1,70E-01	-1,92E-01	-1,46E-01	-2,12E-01	-9,70E-02	-1,61E-01	-1,84E-01
-1,40E-01	-2,41E-01	-2,54E-01	-1,62E-01	-1,16E-01	-1,39E-01	-1,02E-01	-7,31E-02	-2,14E-01	-5,93E-02	-1,22E-01	-1,90E-01
-6,49E-02	-2,41E-01	-2,48E-01	-1,20E-01	-7,47E-02	-9.84E-02	-7,87E-02	1,49E-02	-8,89E-02	-7,20E-02	-1.17E-01	-1.26E-01

A* MATRIX BY ROWS

9,84E-01	-1,60E-01	-3,29E-01	-1,69E-01	-7,11E-02	1,65E-01	4,80E-02	2,73E-02	-1,64E-01	4,50E-02	7.15E-02	-2.75E-02
-1,08E-02	9,75E-01	-2,81E-02	-2,81E-01	-6,81E-02	-2,61E-02	5,99E-02	-2,83E-02	-2,72E-02	-9,15E-02	-7.28E-03	1.08E-02
-7,83E-02	-3,80E-02	1,34E 00	-2,49E-01	4,93E-02	-3,51E-01	-2,10E-01	-1,35E-01	1,86E-01	-5,27E-02	-1.97E-01	-5.84E-02
-1,40E-01	2,49E-01	-2,05E-01	1,18E 00	-3,37E-01	3.19E-01	-4,10E-02	-3,41E-01	-4,81E-01	3,13E-02	1.01E-01	-7.72E-02
8,47E-02	-2,38E-01	-2,20E-01	9,42E-04	1,11E 00	-2,08E-01	1,43E-02	-5,68E-02	1,94E-01	-1,73E-01	-2,15E-01	5,39E-02
-2,65E-01	6,23E-02	-5,24E-02	8,95E-04	-1,54E-01	1,05E 00	-1,55E-01	-3,83E-02	-2,21E-01	1,46E-01	7,86E-02	-8,29E-04
7,81E-02	-1,07E-01	-1,38E-01	-9,59E-02	-2,09E-01	1,68E-01	1,09E 00	-2,70E-01	-1,85E-01	-1,67E-01	1,01E-01	-1,22E-01
-4,41E-02	-1,67E-01	5,64E-02	-1,26E-01	2,62E-03	-3,39E-01	-6,66E-02	1,06E 00	6,24E-02	3,03E-02	-2.20E-01	-2,13E-01
2,79E-02	-2,04E-01	-5,33E-02	-6,39E-02	-7,98E-02	-2,02E-01	-1,30E-01	1,59E-01	1,12E 00	-2,42E-01	-9,39E-02	-4,83E-02
-1,17E-01	-1,93E-01	-1,17E-01	-5,17E-02	1,27E-01	-2,58E-01	-2,23E-01	9,90E-02	6,52E-03	1,10E 00	-2,20E-02	-9,26E-02
-7,18E-02	-1,29E-02	-2,99E-01	3,45E-02	-1,93E-01	2,07E-01	-2,21E-01	1,73E-01	-1,77E-01	8,41E-02	1,11E 00	-3,48E-01
1,50E-01	-7,43E-02	-2.13E-01	2,59E-02	7.83E-02	-9.13E-02	1.62E-01	-2,13E-01	-7,27E-02	-1,74E-01	-1.09E-02	1.07E 00

A INVERSE*A

9,20E-01	-1,62E-01	-5,22E-02	-3,58E-02	1,03E-01	1,59E-02	8,76E-02	1,87E-01	3,21E-04	1,25E-02	-8.86E-02	-1.52E-01
-1,05E-01	8,75E-01	-7,61E-02	-1,54E-02	1,15E-01	7,74E-02	7,80E-02	1,49E-01	-3.73E-02	-1,39E-02	-5.56E-02	-1.15E-01
3,31E-02	1,58E-01	9,44E-01	5,94E-03	-8,41E-02	1,09E-01	-2,78E-02	-1,62E-01	-1,24E-01	-2,33E-02	1,35E-01	1,43E-01
9,87E-02	1,25E-01	-1,39E-01	9,46E-01	-9,78E-02	8,99E-02	1,88E-03	-1,14E-01	-1,01E-01	-2,13E-02	1.75E-01	1,40E-01
3,56E-02	-3,05E-03	7,29E-02	-7,62E-03	9,82E-01	-1,50E-01	-5,18E-02	-2,09E-02	8,58E-02	3,95E-02	-3,17E-02	-3,27E-03
4,18E-02	5,39E-02	2,86E-02	-1,39E-02	-5,01E-02	9,45E-01	-6,33E-02	-5,15E-02	4,51E-02	-1,09E-02	4,39E-02	4,43E-02
7,97E-02	1,14E-02	1,18E-01	3,13E-02	-7,81E-02	-1,65E-01	9,15E-01	-7,18E-02	1,13E-01	3,16E-02	-5,97E-02	2,40E-02
1,21E-02	8,18E-02	1,97E-01	7,18E-02	-6,74E-02	-1,05E-01	-1,27E-01	8,52E-01	9,27E-02	-2,95E-02	-3.14E-02	3,81E-02
-9,39E-02	1,62E-02	8,24E-02	3,70E-02	3,68E-02	3,28E-02	1,00E-02	-3,43E-02	9.47E-01	-1,19E-02	-3,33E-02	-5,33E-02
-7,20E-02	1,08E-02	6,16E-02	4,42E-02	1,30E-03	4,12E-02	-1,34E-02	-9,41E-03	-4,58E-02	9,97E-01	-4.61E-02	-2,65E-02
-4,42E-02	-7,74E-02	-8,43E-02	-5,28E-02	6,09E-02	3,33E-02	1,09E-01	9,79E-02	-8,48E-02	5,01E-02	9.82E-01	-8,85E-02
3,97E-02	-1,93E-01	-1,73E-01	-4,28E-02	6,11E-02	1,60E-02	6,26E-02	2,03E-01	7,85E-02	-2,31E-02	-7.68E-02	9,53E-01

C MATRIX BY ROWS

-7,97E-02	-1,62E-01	-5,22E-02	-3,58E-02	1,03E-01	1,59E-02	8,76E-02	1,87E-01	3,21E-04	1,25E-02	-8,86E-02	-1,52E-01
-1,05E-01	-1,25E-01	-7,61E-02	-1,54E-02	1,15E-01	7,74E-02	7,80E-02	1,49E-01	-3,73E-02	-1,39E-02	-5,56E-02	-1,15E-01
3,31E-02	1,58E-01	-5,61E-02	5,94E-03	-8,41E-02	1,09E-01	-2,78E-02	-1,62E-01	-1,24E-01	-2,33E-02	1,35E-01	1,43E-01
9,87E-02	1,25E-01	-1,39E-01	-5,45E-02	-9,78E-02	8,99E-02	1,88E-03	-1,14E-01	-1,01E-01	-2,13E-02	1,75E-01	1,40E-01
3,56E-02	-3,05E-03	7,29E-02	-7,62E-03	-1,81E-02	-1,50E-01	-5,18E-02	-2,09E-02	8,58E-02	3,95E-02	-3,17E-02	-3,27E-03
4,18E-02	5,39E-02	2,86E-02	-1,39E-02	-5,01E-02	-5,50E-02	-6,33E-02	-5,15E-02	4,51E-02	-1,09E-02	4,39E-02	4,43E-02
7,97E-02	1,14E-02	1,18E-01	3,13E-02	-7,81E-02	-1,65E-01	-8,49E-02	-7,18E-02	1,13E-01	3,16E-02	-5,97E-02	2,40E-02
1,21E-02	8,18E-02	1,97E-01	7,18E-02	-6,74E-02	-1,05E-01	-1,27E-01	-1,48E-01	9,27E-02	-2,95E-02	-3,14E-02	3,81E-02
-9,39E-02	1,62E-02	8,24E-02	3,70E-02	3,68E-02	3,28E-02	1,00E-02	-3,43E-02	-5,30E-02	-1,19E-02	-3,33E-02	-5,33E-02
-7,20E-02	1,08E-02	6,16E-02	4,42E-02	1,30E-03	4,12E-02	-1,34E-02	-9,41E-03	-4,58E-02	-3,48E-03	-4,61E-02	-2,65E-02
-4,42E-02	-7,74E-02	-8,43E-02	-5,28E-02	6,09E-02	3,33E-02	1,09E-01	9,79E-02	-8,48E-02	5,01E-02	-1,81E-02	-8,85E-02
3,97E-02	-1,93E-01	-1,78E-01	-4,28E-02	6,11E-02	1,60E-02	6,26E-02	2,03E-01	7,85E-02	-2,31E-02	-7,68E-02	-4,67E-02

A* MATRIX BY ROWS

1,06E 00	4,27E-02	-3,30E-01	-1,38E-01	-1,82E-01	2,23E-01	-2,41E-02	-1,97E-01	-2,36E-01	1,71E-02	2,14E-01	1,62E-01
1,09E-01	1,14E 00	1,82E-02	-2,77E-01	-2,08E-01	-7,31E-02	-2,00E-02	-2,14E-01	-2,70E-02	-8,48E-02	9,64E-02	1,62E-01
-6,96E-02	-2,32E-01	1,39E 00	-2,80E-01	1,16E-01	-5,27E-01	-1,95E-01	5,79E-02	3,68E-01	-1,90E-02	-3,47E-01	-2,16E-01
-2,64E-01	1,54E-01	7,89E-02	1,29E 00	-2,53E-01	1,55E-01	-1,01E-01	-3,05E-01	-3,37E-01	5,24E-02	-1,33E-01	-2,26E-01
3,64E-02	-2,08E-01	-3,26E-01	2,31E-03	1,12E 00	-7,92E-03	7,34E-02	-5,24E-02	5,54E-02	-2,17E-01	-1,49E-01	7,45E-02
-3,10E-01	-9,00E-03	-4,15E-02	1,96E-02	-9,98E-02	1,06E 00	-1,01E-01	1,39E-02	-2,37E-01	1,64E-01	4,83E-03	-6,94E-02
-1,65E-02	-8,50E-02	-2,17E-01	-9,89E-02	-1,45E-01	3,40E-01	1,15E 00	-2,52E-01	-3,04E-01	-2,18E-01	1,59E-01	-1,24E-01
-4,13E-02	-3,15E-01	-2,28E-01	-2,41E-01	9,24E-02	-2,30E-01	9,70E-02	1,29E 00	-2,27E-02	6,38E-02	-1,92E-01	-2,79E-01
1,22E-01	-2,41E-01	-1,78E-01	-1,18E-01	-1,13E-01	-2,26E-01	-1,27E-01	2,26E-01	1,16E 00	-2,22E-01	-6,00E-02	-2,38E-03
-3,29E-02	-2,34E-01	-2,33E-01	-1,18E-01	1,30E-01	-2,88E-01	-1,94E-01	1,44E-01	5,23E-02	1,10E 00	3,01E-02	-7,22E-02
-6,42E-03	1,43E-02	-2,75E-01	7,78E-02	-2,45E-01	1,73E-01	-3,11E-01	1,18E-01	-7,89E-02	3,51E-02	1,11E 00	-2,59E-01
8,72E-02	2,01E-01	7,50E-03	9,81E-02	-1,08E-02	-6,32E-02	6,66E-02	-5,06E-01	-1,97E-01	-1,73E-01	1,04E-01	1,16E 00

A INVERSE*A

9,71E-01	-7,36E-02	-1,15E-01	-3,39E-02	5,57E-02	7,80E-02	7,50E-02	1,03E-01	-4,79E-02	-3,43E-03	-1,76E-03	-4,25E-02
-3,53E-02	9,39E-01	-9,20E-02	-2,32E-02	5,13E-02	7,66E-02	6,68E-02	8,58E-02	-4,99E-02	-4,67E-03	-5,44E-03	-4,07E-02
1,02E-02	8,10E-02	1,10E 00	3,65E-02	-4,73E-02	-3,72E-02	-5,99E-02	-1,07E-01	1,26E-02	-3,81E-03	1,23E-02	4,36E-02
2,31E-02	1,07E-01	7,55E-02	1,03E 00	-6,19E-02	-1,65E-02	-6,30E-02	-1,29E-01	-5,87E-03	-9,30E-03	4,31E-02	7,30E-02
2,18E-02	2,39E-04	7,78E-03	-5,46E-03	9,88E-01	-3,26E-02	-1,50E-02	-3,12E-03	2,82E-02	3,81E-03	5,65E-04	7,02E-03
2,28E-02	2,98E-02	3,74E-02	8,95E-03	-2,86E-02	9,64E-01	-3,32E-02	-4,07E-02	2,50E-02	1,78E-03	5,89E-03	2,43E-02
2,71E-02	5,01E-03	3,86E-02	1,25E-03	-1,97E-02	-6,36E-02	9,69E-01	-1,55E-02	4,91E-02	9,43E-03	-1,04E-02	6,65E-03
1,83E-02	-5,19E-03	7,82E-02	1,49E-02	-1,72E-02	-8,81E-02	-4,20E-02	9,86E-01	7,12E-02	1,17E-02	-3,93E-02	-1,06E-02
-2,04E-02	-4,17E-02	8,30E-04	-2,53E-04	2,64E-02	-2,46E-03	1,70E-02	4,29E-02	1,01E 00	1,44E-03	-3,28E-02	-3,82E-02
-1,71E-02	-3,48E-02	4,20E-03	-4,16E-04	2,22E-02	-7,48E-03	1,45E-02	3,49E-02	8,54E-03	1,01E 00	-2,93E-02	-3,37E-02
-1,87E-02	-2,54E-02	-7,12E-02	-1,85E-02	2,86E-02	6,25E-02	4,36E-02	4,27E-02	-4,35E-02	-8,18E-03	1,01E 00	-1,27E-02
-1,32E-02	-1,82E-02	-1,01E-01	-2,67E-02	2,42E-02	8,09E-02	5,22E-02	4,39E-02	-6,53E-02	-2,83E-03	3,23E-02	1,00E 00

C MATRIX BY ROWS

-2,87E-02	-7,36E-02	-1,15E-01	-3,39E-02	5,57E-02	7,80E-02	7,50E-02	1,03E-01	-4,79E-02	-3,43E-03	-1,76E-03	-4,25E-02
-3,53E-02	-6,15E-02	-9,20E-02	-2,32E-02	5,13E-02	7,66E-02	6,68E-02	8,58E-02	-4,99E-02	-4,67E-03	-5,44E-03	-4,07E-02
1,02E-02	8,10E-02	9,81E-02	3,65E-02	-4,73E-02	-3,72E-02	-5,99E-02	-1,07E-01	1,26E-02	-3,81E-03	1,23E-02	4,36E-02
2,31E-02	1,07E-01	7,55E-02	3,19E-02	-6,19E-02	-1,65E-02	-6,30E-02	-1,29E-01	-5,87E-03	-9,30E-03	4,31E-02	7,30E-02
2,18E-02	2,39E-04	7,78E-03	-5,46E-03	-1,23E-02	-3,26E-02	-1,50E-02	-3,12E-03	2,82E-02	3,81E-03	5,65E-04	7,02E-03
2,28E-02	2,98E-02	3,74E-02	8,95E-03	-2,86E-02	-3,63E-02	-3,32E-02	-4,07E-02	2,50E-02	1,78E-03	5,89E-03	2,43E-02
2,71E-02	5,01E-03	3,86E-02	1,25E-03	-1,97E-02	-6,36E-02	-3,11E-02	-1,55E-02	4,91E-02	9,43E-03	-1,04E-02	6,65E-03
1,83E-02	-5,19E-03	7,82E-02	1,49E-02	-1,72E-02	-8,81E-02	-4,20E-02	-1,40E-02	7,12E-02	1,17E-02	-3,93E-02	-1,06E-02
-2,04E-02	-4,17E-02	8,30E-04	-2,53E-04	2,64E-02	-2,46E-03	1,70E-02	4,29E-02	1,00E-02	1,44E-03	-3,28E-02	-3,82E-02
-1,71E-02	-3,48E-02	4,20E-03	-4,16E-04	2,22E-02	-7,48E-03	1,45E-02	3,49E-02	8,54E-03	5,10E-03	-2,93E-02	-3,37E-02
-1,87E-02	-2,54E-02	-7,12E-02	-1,85E-02	2,86E-02	6,25E-02	4,36E-02	4,27E-02	-4,35E-02	-8,18E-03	1,49E-02	-1,27E-02
-1,32E-02	-1,82E-02	-1,01E-01	-2,67E-02	2,42E-02	8,09E-02	5,22E-02	4,39E-02	-6,53E-02	-2,83E-03	3,23E-02	1,99E-05

A* MATRIX BY ROWS

1,01E 00	-7,08E-02	-5,39E-01	-1,99E-01	-9,32E-02	3,67E-01	1,05E-01	-2,98E-02	-3,29E-01	1,05E-02	2,27E-01	1,03E-01
4,69E-02	1,03E 00	-1,64E-01	-3,24E-01	-1,14E-01	7,60E-02	1,07E-01	-5,73E-02	-1,27E-01	-9,33E-02	9,64E-02	9,28E-02
-6,32E-02	-1,49E-01	1,56E 00	-2,23E-01	6,28E-02	-6,15E-01	-2,82E-01	-6,75E-02	4,20E-01	-1,82E-02	-3,68E-01	-1,86E-01
-2,30E-01	3,33E-01	2,09E-01	1,35E 00	-3,54E-01	1,31E-01	-2,05E-01	-5,22E-01	-3,51E-01	3,66E-02	-6,26E-02	-1,07E-01
6,90E-02	-2,15E-01	-3,33E-01	-1,19E-02	1,11E 00	-4,70E-02	6,02E-02	-4,38E-02	9,15E-02	-2,11E-01	-1,45E-01	8,31E-02
-2,79E-01	4,94E-02	3,55E-02	4,13E-02	-1,48E-01	1,00E 00	-1,60E-01	-6,57E-02	-1,99E-01	1,67E-01	1,33E-02	-2,86E-02
2,21E-02	-7,11E-02	-2,00E-01	-1,05E-01	-1,72E-01	2,86E-01	1,12E 00	-2,72E-01	-2,62E-01	-2,10E-01	1,67E-01	-1,02E-01
-7,19E-03	-3,41E-01	-9,62E-02	-2,21E-01	6,95E-02	-3,94E-01	2,82E-02	1,29E 00	1,14E-01	8,72E-02	-2,69E-01	-3,09E-01
9,69E-02	-3,10E-01	-1,88E-01	-1,24E-01	-7,27E-02	-2,32E-01	-9,84E-02	3,00E-01	1,18E 00	-2,18E-01	-1,08E-01	-5,98E-02
-5,46E-02	-2,99E-01	-2,36E-01	-1,24E-01	1,67E-01	-3,05E-01	-1,69E-01	2,12E-01	7,38E-02	1,10E 00	-1,75E-02	-1,28E-01
-3,17E-02	-1,84E-02	-3,47E-01	6,08E-02	-2,10E-01	2,42E-01	-2,63E-01	1,68E-01	-1,24E-01	2,50E-02	1,11E 00	-2,78E-01
6,05E-02	1,85E-01	-1,78E-01	5,32E-02	2,94E-02	1,02E-01	1,61E-01	-4,44E-01	-3,31E-01	-1,86E-01	1,76E-01	1,17E 00

A INVERSE*

9,53E-01	-1,48E-01	-2,15E-01	-6,72E-02	1,05E-01	1,31E-01	1,39E-01	2,04E-01	-7,50E-02	-3,35E-03	-1,00E-02	-8,47E-02
-6,08E-02	8,79E-01	-1,68E-01	-4,49E-02	9,51E-02	1,30E-01	1,21E-01	1,66E-01	-8,10E-02	-6,34E-03	-1,58E-02	-7,92E-02
1,27E-02	1,66E-01	1,18E 00	7,24E-02	-9,04E-02	-5,12E-02	-1,10E-01	-2,14E-01	5,62E-03	-1,10E-02	3,29E-02	8,94E-02
3,60E-02	2,13E-01	1,24E-01	1,06E 00	-1,15E-01	2,87E-04	-1,09E-01	-2,51E-01	-3,86E-02	-2,28E-02	9,70E-02	1,46E-01
4,07E-02	-3,58E-03	1,05E-02	-1,20E-02	9,79E-01	-6,04E-02	-2,57E-02	-7,78E-04	5,32E-02	7,32E-03	2,29E-04	1,09E-02
4,04E-02	5,73E-02	6,48E-02	1,65E-02	-5,25E-02	9,40E-01	-5,91E-02	-7,65E-02	4,00E-02	2,08E-03	1,41E-02	4,67E-02
4,97E-02	6,78E-03	7,27E-02	2,17E-03	-3,52E-02	-1,20E-01	9,43E-01	-2,65E-02	9,30E-02	1,81E-02	-2,17E-02	9,94E-03
3,29E-02	-8,44E-03	1,61E-01	3,26E-02	-3,38E-02	-1,74E-01	-8,45E-02	9,69E-01	1,40E-01	2,27E-02	-8,01E-02	-2,23E-02
-3,61E-02	-7,84E-02	1,82E-02	3,29E-03	4,66E-02	-2,05E-02	2,37E-02	7,67E-02	1,03E 00	4,30E-03	-6,93E-02	-7,40E-02
-3,04E-02	-6,54E-02	2,26E-02	2,48E-03	3,92E-02	-2,82E-02	2,04E-02	6,20E-02	2,69E-02	1,01E 00	-6,18E-02	-6,55E-02
-3,22E-02	-5,18E-02	-1,39E-01	-3,77E-02	5,45E-02	1,15E-01	8,30E-02	8,54E-02	-7,85E-02	-1,48E-02	1,03E 00	-2,48E-02
-2,16E-02	-4,08E-02	-2,04E-01	-5,62E-02	4,78E-02	1,55E-01	1,04E-01	9,27E-02	-1,24E-01	-4,03E-03	6,34E-02	9,99E-01

C MATRIX BY ROWS

-4.74E-02	-1.48E-01	-2.15E-01	-6.72E-02	1.05E-01	1.31E-01	1.39E-01	2.04E-01	-7.50E-02	-3.35E-03	-1.00E-02	-8.47E-02
-6.08E-02	-1.21E-01	-1.68E-01	-4.49E-02	9.51E-02	1.30E-01	1.21E-01	1.66E-01	-8.10E-02	-6.34E-03	-1.58E-02	-7.92E-02
1.27E-02	1.66E-01	1.82E-01	7.24E-02	-9.04E-02	-5.12E-02	-1.10E-01	-2.14E-01	5.62E-03	-1.10E-02	3.29E-02	8.94E-02
3.60E-02	2.13E-01	1.24E-01	5.98E-02	-1.15E-01	2.87E-04	-1.09E-01	-2.51E-01	-3.86E-02	-2.28E-02	9.70E-02	1.46E-01
4.07E-02	-3.58E-03	1.05E-02	-1.20E-02	-2.10E-02	-6.04E-02	-2.57E-02	-7.78E-04	5.32E-02	7.32E-03	2.29E-04	1.09E-02
4.04E-02	5.73E-02	6.48E-02	1.65E-02	-5.25E-02	-5.98E-02	-5.91E-02	-7.65E-02	4.00E-02	2.08E-03	1.41E-02	4.67E-02
4.97E-02	6.78E-03	7.27E-02	2.17E-03	-3.52E-02	-1.20E-01	-5.74E-02	-2.65E-02	9.30E-02	1.81E-02	-2.17E-02	9.94E-03
3.29E-02	-8.44E-03	1.61E-01	3.26E-02	-3.38E-02	-1.74E-01	-8.45E-02	-3.10E-02	1.40E-01	2.27E-02	-8.01E-02	-2.23E-02
-3.61E-02	-7.84E-02	1.82E-02	3.29E-03	4.66E-02	-2.05E-02	2.37E-02	7.67E-02	3.17E-02	4.30E-03	-6.93E-02	-7.40E-02
-3.04E-02	-6.54E-02	2.26E-02	2.48E-03	3.92E-02	-2.82E-02	2.04E-02	6.20E-02	2.69E-02	1.14E-02	-6.18E-02	-6.55E-02
-3.22E-02	-5.18E-02	-1.39E-01	-3.77E-02	5.45E-02	1.15E-01	8.30E-02	8.54E-02	-7.85E-02	-1.48E-02	2.80E-02	-2.48E-02
-2.16E-02	-4.08E-02	-2.04E-01	-5.62E-02	4.78E-02	1.55E-01	1.04E-01	9.27E-02	-1.24E-01	-4.03E-03	6.34E-02	-8.14E-04

A* MATRIX BY ROWS

1.05E 00	1.71E-01	-1.78E-01	-7.46E-02	-2.47E-01	1.91E-01	-1.08E-01	-3.64E-01	-2.38E-01	6.71E-03	2.32E-01	2.24E-01
1.21E-01	1.25E 00	1.24E-01	-2.35E-01	-2.66E-01	-1.02E-01	-8.83E-02	-3.49E-01	-2.48E-02	-9.24E-02	1.24E-01	2.23E-01
-4.98E-02	-3.45E-01	1.24E 00	-3.45E-01	1.66E-01	-5.06E-01	-1.24E-01	2.09E-01	3.78E-01	-7.54E-03	-3.53E-01	-2.60E-01
-2.52E-01	-2.65E-02	7.95E-02	1.25E 00	-1.90E-01	1.68E-02	-7.64E-02	-1.20E-01	-1.92E-01	8.85E-02	-2.59E-01	-3.52E-01
1.33E-02	-1.78E-01	-2.98E-01	2.27E-02	1.12E 00	1.82E-02	6.96E-02	-8.83E-02	2.59E-02	-2.24E-01	-1.45E-01	8.15E-02
-3.17E-01	-6.32E-02	-7.28E-02	3.12E-03	-7.08E-02	1.06E 00	-7.54E-02	7.74E-02	-2.23E-01	1.70E-01	-1.88E-02	-1.06E-01
-3.85E-02	-7.76E-02	-2.00E-01	-8.47E-02	-1.40E-01	3.61E-01	1.15E 00	-2.62E-01	-3.22E-01	-2.23E-01	1.52E-01	-1.31E-01
-5.84E-02	-2.99E-01	-4.00E-01	-2.79E-01	1.14E-01	-6.24E-02	1.75E-01	1.32E 00	-1.58E-01	4.28E-02	-1.00E-01	-2.42E-01
1.28E-01	-1.89E-01	-2.39E-01	-1.28E-01	-1.29E-01	-1.52E-01	-1.13E-01	1.87E-01	1.09E 00	-2.33E-01	6.87E-03	4.84E-02
-2.81E-02	-1.85E-01	-2.98E-01	-1.27E-01	1.15E-01	-2.08E-01	-1.80E-01	1.09E-01	-1.80E-02	1.08E 00	9.66E-02	-2.13E-02
3.22E-04	4.60E-02	-2.24E-01	9.47E-02	-2.67E-01	1.43E-01	-3.41E-01	7.38E-02	-6.54E-02	3.99E-02	1.10E 00	-2.43E-01
8.98E-02	2.43E-01	2.19E-01	1.62E-01	-5.10E-02	-2.03E-01	-3.02E-02	-6.00E-01	-9.17E-02	-1.68E-01	3.33E-02	1.15E 00

A INVERSE*A

9.66E-01	8.46E-03	-5.74E-02	-3.01E-03	2.10E-02	9.34E-02	4.06E-02	6.14E-03	-7.80E-02	-1.33E-02	2.84E-02	3.09E-03
-3.25E-02	9.96E-01	-5.90E-02	-6.12E-03	2.49E-02	8.43E-02	4.24E-02	1.89E-02	-6.82E-02	-1.09E-02	2.09E-02	-4.62E-03
2.69E-02	-1.70E-02	1.06E 00	4.04E-03	-1.39E-02	-9.08E-02	-3.56E-02	2.73E-03	7.70E-02	1.33E-02	-3.59E-02	-1.24E-02
3.35E-02	2.55E-03	1.08E-01	1.02E 00	-3.02E-02	-1.25E-01	-6.29E-02	-2.93E-02	1.01E-01	1.52E-02	-4.47E-02	-5.00E-03
8.99E-03	1.51E-02	1.50E-02	3.78E-03	9.88E-01	-1.28E-02	-1.36E-02	-1.94E-02	7.75E-03	4.54E-04	4.86E-03	1.17E-02
1.70E-02	7.59E-03	3.62E-02	5.61E-03	-1.58E-02	9.55E-01	-2.54E-02	-1.70E-02	3.49E-02	5.11E-03	-9.43E-03	5.48E-03
1.52E-02	1.04E-02	1.18E-02	1.88E-04	-1.33E-02	-2.11E-02	9.85E-01	-1.40E-02	1.58E-02	2.32E-03	3.89E-03	1.14E-02
1.41E-02	-1.23E-02	-2.37E-02	-1.29E-02	-1.34E-04	-6.78E-03	4.40E-03	1.02E 00	8.99E-03	3.29E-03	4.65E-03	1.39E-03
-1.42E-02	-2.06E-02	-6.33E-02	-1.60E-02	2.23E-02	5.38E-02	3.73E-02	3.66E-02	9.61E-01	-4.32E-03	1.35E-02	-8.60E-03
-1.14E-02	-1.76E-02	-5.47E-02	-1.40E-02	1.87E-02	4.57E-02	3.17E-02	3.14E-02	-3.33E-02	9.96E-01	1.19E-02	-6.92E-03
-1.83E-02	7.03E-03	-1.30E-02	3.54E-03	8.30E-03	3.75E-02	1.39E-02	-3.47E-03	-3.24E-02	-6.08E-03	1.01E 00	1.07E-04
-1.79E-02	2.23E-02	1.05E-02	1.24E-02	-3.64E-04	2.86E-02	1.30E-03	-2.47E-02	-2.84E-02	-7.00E-03	8.22E-03	1.01E 00

C MATRIX BY ROWS

-3.43E-02	8.46E-03	-5.74E-02	-3.01E-03	2.10E-02	9.34E-02	4.06E-02	6.14E-03	-7.80E-02	-1.33E-02	2.84E-02	3.09E-03
-3.25E-02	-3.65E-03	-5.90E-02	-6.12E-03	2.49E-02	8.43E-02	4.24E-02	1.89E-02	-6.82E-02	-1.09E-02	2.09E-02	-4.62E-03
2.69E-02	-1.70E-02	5.82E-02	4.04E-03	-1.39E-02	-9.08E-02	-3.56E-02	2.73E-03	7.70E-02	1.33E-02	-3.59E-02	-1.24E-02
3.35E-02	2.55E-03	1.08E-01	1.85E-02	-3.02E-02	-1.25E-01	-6.29E-02	-2.93E-02	1.01E-01	1.52E-02	-4.47E-02	-5.00E-03
8.99E-03	1.51E-02	1.50E-02	3.78E-03	-1.22E-02	-1.28E-02	-1.36E-02	-1.94E-02	7.75E-03	4.54E-04	4.86E-03	1.17E-02
1.70E-02	7.59E-03	3.62E-02	5.61E-03	-1.58E-02	-4.46E-02	-2.54E-02	-1.70E-02	3.49E-02	5.11E-03	-9.43E-03	5.48E-03
1.52E-02	1.04E-02	1.18E-02	1.88E-04	-1.33E-02	-2.11E-02	-1.48E-02	-1.40E-02	1.58E-02	2.32E-03	3.89E-03	1.14E-02
1.41E-02	-1.23E-02	-2.37E-02	-1.29E-02	-1.34E-04	-6.78E-03	4.40E-03	1.77E-02	8.99E-03	3.29E-03	4.65E-03	1.39E-03
-1.42E-02	-2.06E-02	-6.33E-02	-1.60E-02	2.23E-02	5.38E-02	3.73E-02	3.66E-02	-3.94E-02	-4.32E-03	1.35E-02	-8.60E-03
-1.14E-02	-1.76E-02	-5.47E-02	-1.40E-02	1.87E-02	4.57E-02	3.17E-02	3.14E-02	-3.33E-02	-3.64E-03	1.19E-02	-6.92E-03
-1.83E-02	7.03E-03	-1.30E-02	3.54E-03	8.30E-03	3.75E-02	1.39E-02	-3.47E-03	-3.24E-02	-6.08E-03	8.51E-03	1.07E-04
-1.79E-02	2.23E-02	1.05E-02	1.24E-02	-3.64E-04	2.86E-02	1.30E-03	-2.47E-02	-2.84E-02	-7.00E-03	8.22E-03	6.85E-03

A* MATRIX BY ROWS

9.94E-01	1.95E-01	-2.42E-01	-6.88E-02	-2.18E-01	3.32E-01	-5.31E-02	-3.71E-01	-3.58E-01	-1.52E-02	2.71E-01	2.29E-01
5.71E-02	1.25E 00	3.25E-02	-2.39E-01	-2.23E-01	4.98E-02	-1.60E-02	-3.25E-01	-1.50E-01	-1.13E-01	1.58E-01	2.14E-01
-1.53E-02	-3.88E-01	1.25E 00	-3.60E-01	1.63E-01	-5.88E-01	-1.41E-01	2.48E-01	4.53E-01	8.39E-03	-3.85E-01	-2.80E-01
-1.89E-01	-3.60E-02	2.42E-01	1.28E 00	-2.36E-01	-1.95E-01	-1.75E-01	-1.51E-01	-1.88E-02	1.16E-01	-3.34E-01	-3.65E-01
2.49E-02	-1.49E-01	-2.70E-01	3.16E-02	1.10E 00	6.73E-04	4.67E-02	-1.25E-01	3.48E-02	-2.24E-01	-1.37E-01	1.02E-01
-2.86E-01	-6.01E-02	-1.63E-02	8.68E-03	-9.49E-02	9.74E-01	-1.16E-01	5.97E-02	-1.57E-01	1.80E-01	-3.90E-02	-1.02E-01
-1.76E-02	-4.99E-02	-1.53E-01	-7.42E-02	-1.66E-01	3.17E-01	1.11E 00	-3.02E-01	-2.92E-01	-2.20E-01	1.53E-01	-1.11E-01
-3.76E-02	-3.09E-01	-4.55E-01	-3.02E-01	1.13E-01	-5.05E-02	1.88E-01	1.34E 00	-1.64E-01	4.46E-02	-7.79E-02	-2.30E-01
1.02E-01	-2.08E-01	-3.32E-01	-1.46E-01	-9.88E-02	-5.89E-02	-5.75E-02	2.29E-01	1.02E 00	-2.43E-01	3.45E-02	4.25E-02
-5.05E-02	-2.01E-01	-3.87E-01	-1.46E-01	1.43E-01	-1.21E-01	-1.28E-01	1.48E-01	-8.49E-02	1.07E 00	1.24E-01	-2.53E-02
-2.35E-02	4.55E-02	-2.49E-01	9.54E-02	-2.52E-01	1.92E-01	-3.18E-01	8.11E-02	-1.06E-01	3.30E-02	1.11E 00	-2.48E-01
5.93E-02	2.75E-01	2.63E-01	1.89E-01	-5.20E-02	-1.78E-01	-3.74E-02	-6.42E-01	-1.20E-01	-1.76E-01	3.11E-02	1.16E 00

A INVERSE*A

9.34E-01	2.11E-02	-1.08E-01	-4.15E-03	3.83E-02	1.81E-01	7.63E-02	6.26E-03	-1.52E-01	-2.63E-02	5.67E-02	8.78E-03
-6.21E-02	9.96E-01	-1.12E-01	-1.09E-02	4.63E-02	1.63E-01	8.01E-02	3.25E-02	-1.32E-01	-2.14E-02	4.18E-02	-6.67E-03
5.26E-02	-3.84E-02	1.11E 00	6.11E-03	-2.48E-02	-1.78E-01	-6.73E-02	1.14E-02	1.52E-01	2.67E-02	-7.23E-02	-2.73E-02
6.49E-02	-8.64E-04	2.10E-01	1.04E 00	-5.64E-02	-2.47E-01	-1.21E-01	-5.11E-02	2.00E-01	3.05E-02	-9.13E-02	-1.41E-02
1.65E-02	2.99E-02	2.90E-02	7.74E-03	9.77E-01	-2.33E-02	-2.59E-02	-3.81E-02	1.36E-02	5.68E-04	9.74E-03	2.28E-02
3.23E-02	1.33E-02	6.97E-02	1.07E-02	-2.97E-02	9.14E-01	-4.83E-02	-3.13E-02	6.77E-02	9.97E-03	-1.91E-02	9.45E-03
2.84E-02	2.02E-02	2.10E-02	1.97E-04	-2.51E-02	-3.81E-02	9.73E-01	-2.68E-02	2.82E-02	4.12E-03	8.36E-03	2.22E-02
2.70E-02	-2.44E-02	-5.18E-02	-2.66E-02	7.90E-04	-8.57E-03	1.12E-02	1.04E 00	1.39E-02	5.95E-03	1.12E-02	3.18E-03
-2.67E-02	-3.87E-02	-1.26E-01	-3.18E-02	4.26E-02	1.07E-01	7.29E-02	7.04E-02	9.22E-01	-8.65E-03	2.86E-02	-1.49E-02
-2.15E-02	-3.31E-02	-1.09E-01	-2.79E-02	3.58E-02	9.07E-02	6.21E-02	6.04E-02	-6.63E-02	9.93E-01	2.52E-02	-1.19E-02
-3.51E-02	1.56E-02	-2.17E-02	8.04E-03	1.48E-02	7.08E-02	2.51E-02	-9.53E-03	-6.18E-02	-1.18E-02	1.02E 00	1.05E-03
-3.48E-02	4.57E-02	2.65E-02	2.61E-02	-2.23E-03	5.25E-02	-3.46E-04	-5.19E-02	-5.32E-02	-1.36E-02	1.47E-02	1.01E 00

C MATRIX BY ROWS

-6.61E-02	2.11E-02	-1.08E-01	-4.15E-03	3.83E-02	1.81E-01	7.63E-02	6.26E-03	-1.52E-01	-2.63E-02	5.67E-02	8.78E-03
-6.21E-02	-3.70E-03	-1.12E-01	-1.09E-02	4.63E-02	1.63E-01	8.01E-02	3.25E-02	-1.32E-01	-2.14E-02	4.18E-02	-6.67E-03
5.26E-02	-3.84E-02	1.11E-01	6.11E-03	-2.48E-02	-1.78E-01	-6.73E-02	1.14E-02	1.52E-01	2.67E-02	-7.23E-02	-2.73E-02
6.49E-02	-8.64E-04	2.10E-01	3.52E-02	-5.64E-02	-2.47E-01	-1.21E-01	-5.11E-02	2.00E-01	3.05E-02	-9.13E-02	-1.41E-02
1.65E-02	2.99E-02	2.90E-02	7.74E-03	-2.34E-02	-2.33E-02	-2.59E-02	-3.81E-02	1.36E-02	5.68E-04	9.74E-03	2.28E-02
3.23E-02	1.33E-02	6.97E-02	1.07E-02	-2.97E-02	-8.61E-02	-4.83E-02	-3.13E-02	6.77E-02	9.97E-03	-1.91E-02	9.45E-03
2.84E-02	2.02E-02	2.10E-02	1.97E-04	-2.51E-02	-3.81E-02	-2.74E-02	-2.68E-02	2.82E-02	4.12E-03	8.36E-03	2.22E-02
2.70E-02	-2.44E-02	-5.18E-02	-2.66E-02	7.90E-04	-8.57E-03	1.12E-02	3.63E-02	1.39E-02	5.95E-03	1.12E-02	3.18E-03
-2.67E-02	-3.87E-02	-1.26E-01	-3.18E-02	4.26E-02	1.07E-01	7.29E-02	7.04E-02	-7.82E-02	-8.65E-03	2.86E-02	-1.49E-02
-2.15E-02	-3.31E-02	-1.09E-01	-2.79E-02	3.58E-02	9.07E-02	6.21E-02	6.04E-02	-6.63E-02	-7.32E-03	2.52E-02	-1.19E-02
-3.51E-02	1.56E-02	-2.17E-02	8.04E-03	1.48E-02	7.08E-02	2.51E-02	-9.53E-03	-6.18E-02	-1.18E-02	1.62E-02	1.05E-03
-3.48E-02	4.57E-02	2.65E-02	2.61E-02	-2.23E-03	5.25E-02	-3.46E-04	-5.19E-02	-5.32E-02	-1.36E-02	1.47E-02	1.38E-02

A* MATRIX BY ROWS

1.10E 00	1.31E-01	-1.54E-01	-9.04E-02	-2.59E-01	8.64E-02	-1.36E-01	-3.30E-01	-1.43E-01	2.59E-02	1.99E-01	2.10E-01
1.70E-01	1.23E 00	1.78E-01	-2.40E-01	-2.90E-01	-2.17E-01	-1.33E-01	-3.44E-01	7.33E-02	-7.45E-02	9.17E-02	2.19E-01
-8.03E-02	-2.93E-01	1.25E 00	-3.22E-01	1.60E-01	-4.46E-01	-1.23E-01	1.52E-01	3.17E-01	-2.22E-02	-3.28E-01	-2.38E-01
-3.03E-01	1.27E-02	-4.81E-02	1.24E 00	-1.64E-01	2.08E-01	-2.93E-03	-1.29E-01	-3.54E-01	6.05E-02	-1.78E-01	-3.21E-01
8.19E-03	-2.06E-01	-3.25E-01	1.21E-02	1.13E 00	2.75E-02	8.84E-02	-5.30E-02	2.39E-02	-2.22E-01	-1.53E-01	6.45E-02
-3.41E-01	-5.61E-02	-1.12E-01	1.57E-03	-5.68E-02	1.12E 00	-4.78E-02	8.02E-02	-2.78E-01	1.60E-01	1.25E-03	-1.03E-01
-5.10E-02	-1.01E-01	-2.39E-01	-9.54E-02	-1.20E-01	3.92E-01	1.18E 00	-2.29E-01	-3.43E-01	-2.25E-01	1.53E-01	-1.45E-01
-7.18E-02	-2.94E-01	-3.26E-01	-2.54E-01	1.12E-01	-1.01E-01	1.50E-01	1.30E 00	-1.30E-01	4.49E-02	-1.34E-01	-2.58E-01
1.47E-01	-1.84E-01	-1.55E-01	-1.10E-01	-1.51E-01	-2.38E-01	-1.59E-01	1.61E-01	1.16E 00	-2.24E-01	-2.65E-02	4.41E-02
-1.11E-02	-1.81E-01	-2.17E-01	-1.10E-01	9.60E-02	-2.90E-01	-2.23E-01	8.54E-02	4.74E-02	1.09E 00	6.34E-02	-2.69E-02
1.78E-02	4.11E-02	-2.13E-01	9.12E-02	-2.76E-01	1.10E-01	-3.54E-01	7.56E-02	-3.67E-02	4.52E-02	1.10E 00	-2.42E-01
1.14E-01	2.10E-01	1.48E-01	1.30E-01	-4.32E-02	-1.96E-01	-7.78E-03	-5.51E-01	-8.72E-02	-1.62E-01	4.74E-02	1.15E 00

A INVERSE*A

9.92E-01	-1.56E-02	-2.80E-02	-7.58E-03	1.34E-02	2.18E-02	1.87E-02	2.30E-02	-1.47E-02	-1.18E-03	1.03E-03	-9.34E-03
-9.67E-03	9.86E-01	-2.30E-02	-5.45E-03	1.28E-02	2.11E-02	1.70E-02	1.97E-02	-1.46E-02	-1.46E-03	-4.72E-05	-9.34E-03
3.79E-03	1.69E-02	1.02E 00	8.21E-03	-1.12E-02	-1.26E-02	-1.50E-02	-2.32E-02	6.77E-03	-2.84E-04	9.92E-04	9.13E-03
6.92E-03	2.37E-02	2.19E-02	1.01E 00	-1.52E-02	-9.98E-03	-1.68E-02	-2.98E-02	3.63E-03	-1.01E-03	7.38E-03	1.58E-02
5.33E-03	8.37E-04	2.54E-03	-8.60E-04	9.97E-01	-8.02E-03	-4.04E-03	-1.66E-03	6.57E-03	1.19E-03	1.51E-04	2.29E-03
5.76E-03	7.12E-03	1.02E-02	2.14E-03	-6.90E-03	9.90E-01	-8.52E-03	-9.93E-03	7.23E-03	7.67E-04	1.02E-03	5.54E-03
7.06E-03	1.53E-03	9.12E-03	4.65E-04	-5.30E-03	-1.49E-02	9.92E-01	-3.98E-03	1.20E-02	1.95E-03	-2.24E-03	2.24E-03
4.69E-03	-1.50E-03	1.63E-02	2.58E-03	-3.64E-03	-1.97E-02	-8.97E-03	9.98E-01	1.62E-02	2.54E-03	-8.13E-03	-2.27E-03
-5.40E-03	-9.95E-03	-2.95E-03	-8.24E-04	7.02E-03	2.30E-03	5.81E-03	1.11E-02	1.00E-00	3.84E-04	-6.43E-03	-8.82E-03
-4.31E-03	-8.58E-03	-1.94E-03	-6.59E-04	5.81E-03	1.08E-03	4.57E-03	9.43E-03	5.33E-04	1.00E 00	-5.78E-03	-7.58E-03
-5.02E-03	-5.24E-03	-1.65E-02	-3.71E-03	6.45E-03	1.57E-02	1.04E-02	9.45E-03	-1.17E-02	-1.43E-03	1.00E 00	-2.69E-03
-3.51E-03	-3.32E-03	-2.15E-02	-5.20E-03	5.45E-03	1.92E-02	1.14E-02	8.62E-03	-1.47E-02	-1.85E-03	7.39E-03	1.00E 00

C MATRIX BY ROWS

-8.25E-03	-1.56E-02	-2.80E-02	-7.58E-03	1.34E-02	2.18E-02	1.87E-02	2.30E-02	-1.47E-02	-1.18E-03	1.03E-03	-9.34E-03
-9.67E-03	-1.36E-02	-2.30E-02	-5.45E-03	1.28E-02	2.11E-02	1.70E-02	1.97E-02	-1.46E-02	-1.46E-03	-4.72E-05	-9.34E-03
3.79E-03	1.69E-02	2.42E-02	8.21E-03	-1.12E-02	-1.26E-02	-1.50E-02	-2.32E-02	6.77E-03	-2.84E-04	9.92E-04	9.13E-03
6.92E-03	2.37E-02	2.19E-02	7.79E-03	-1.52E-02	-9.98E-03	-1.68E-02	-2.98E-02	3.63E-03	-1.01E-03	7.38E-03	1.58E-02
5.33E-03	8.37E-04	2.54E-03	-8.60E-04	-3.41E-03	-8.02E-03	-4.04E-03	-1.66E-03	6.57E-03	1.19E-03	1.51E-04	2.29E-03
5.76E-03	7.12E-03	1.02E-02	2.14E-03	-6.90E-03	-1.04E-02	-8.52E-03	-9.93E-03	7.23E-03	7.67E-04	1.02E-03	5.54E-03
7.06E-03	1.53E-03	9.12E-03	4.65E-04	-5.30E-03	-1.49E-02	-7.80E-03	-3.98E-03	1.20E-02	1.95E-03	-2.24E-03	2.24E-03
4.69E-03	-1.50E-03	1.63E-02	2.58E-03	-3.64E-03	-1.97E-02	-8.97E-03	-2.47E-03	1.62E-02	2.54E-03	-8.13E-03	-2.27E-03
-5.40E-03	-9.95E-03	-2.95E-03	-8.24E-04	7.02E-03	2.30E-03	5.81E-03	1.11E-02	-2.41E-04	3.84E-04	-6.43E-03	-8.82E-03
-4.31E-03	-8.58E-03	-1.94E-03	-6.59E-04	5.61E-03	1.08E-03	4.57E-03	9.43E-03	5.33E-04	4.53E-04	-5.78E-03	-7.58E-03
-5.02E-03	-5.24E-03	-1.65E-02	-3.71E-03	6.45E-03	1.57E-02	1.04E-02	9.45E-03	-1.17E-02	-1.43E-03	3.40E-03	-2.69E-03
-3.51E-03	-3.32E-03	-2.15E-02	-5.20E-03	5.45E-03	1.92E-02	1.14E-02	8.62E-03	-1.47E-02	-1.85E-03	7.39E-03	2.67E-04

A* MATRIX BY ROWS

1.09E 00	1.07E-01	-2.07E-01	-1.04E-01	-2.35E-01	1.33E-01	-1.01E-01	-2.92E-01	-1.76E-01	2.25E-02	2.05E-01	1.96E-01
1.49E-01	1.20E 00	1.28E-01	-2.51E-01	-2.64E-01	-1.69E-01	-9.71E-02	-3.06E-01	3.82E-02	-7.85E-02	9.49E-02	2.02E-01
-7.53E-02	-2.78E-01	1.29E 00	-3.11E-01	1.47E-01	-4.73E-01	-1.44E-01	1.28E-01	3.35E-01	-2.07E-02	-3.35E-01	-2.32E-01
-2.89E-01	5.24E-02	-3.49E-03	1.26E 00	-1.92E-01	1.82E-01	-3.58E-02	-1.80E-01	-3.41E-01	6.00E-02	-1.68E-01	-2.95E-01
1.69E-02	-2.05E-01	-3.24E-01	9.94E-03	1.13E 00	1.63E-02	8.30E-02	-5.48E-02	3.32E-02	-2.20E-01	-1.51E-01	6.85E-02
-3.31E-01	-4.24E-02	-8.87E-02	6.85E-03	-7.00E-02	1.10E 00	-6.51E-02	6.03E-02	-2.63E-01	1.62E-01	1.49E-03	-9.35E-02
-3.98E-02	-9.50E-02	-2.30E-01	-9.56E-02	-1.29E-01	3.75E-01	1.17E 00	-2.37E-01	-3.30E-01	-2.23E-01	1.54E-01	-1.38E-01
-6.21E-02	-3.01E-01	-3.01E-01	-2.52E-01	1.06E-01	-1.37E-01	1.36E-01	1.30E 00	-9.96E-02	5.01E-02	-1.49E-01	-2.63E-01
1.38E-01	-2.01E-01	-1.66E-01	-1.14E-01	-1.38E-01	-2.30E-01	-1.46E-01	1.81E-01	1.16E 00	-2.23E-01	-3.45E-02	3.05E-02
-1.83E-02	-1.97E-01	-2.27E-01	-1.13E-01	1.07E-01	-2.85E-01	-2.12E-01	1.05E-01	4.58E-02	1.09E 00	5.53E-02	-3.97E-02
9.43E-03	3.38E-02	-2.32E-01	8.75E-02	-2.67E-01	1.31E-01	-3.40E-01	8.79E-02	-5.20E-02	4.33E-02	1.10E 00	-2.47E-01
1.05E-01	2.09E-01	1.11E-01	1.22E-01	-3.40E-02	-1.58E-01	1.27E-02	-5.40E-01	-1.19E-01	-1.67E-01	6.31E-02	1.16E 00

A INVERSE*A

9.84E-01	-3.13E-02	-5.51E-02	-1.51E-02	2.64E-02	4.24E-02	3.67E-02	4.57E-02	-2.83E-02	-2.18E-03	1.80E-03	-1.85E-02
-1.87E-02	9.73E-01	-4.52E-02	-1.08E-02	2.52E-02	4.08E-02	3.33E-02	3.90E-02	-2.82E-02	-2.76E-03	-3.09E-04	-1.85E-02
7.12E-03	3.39E-02	1.05E 00	1.64E-02	-2.20E-02	-2.39E-02	-2.94E-02	-4.64E-02	1.26E-02	-7.40E-04	2.31E-03	1.83E-02
1.32E-02	4.74E-02	4.25E-02	1.02E 00	-2.99E-02	-1.82E-02	-3.28E-02	-5.92E-02	5.81E-03	-2.25E-03	1.52E-02	3.15E-02
1.05E-02	1.45E-03	4.73E-03	-1.79E-03	9.93E-01	-1.57E-02	-7.79E-03	-3.00E-03	1.29E-02	2.34E-03	2.86E-04	4.41E-03
1.12E-02	1.41E-02	1.99E-02	4.22E-03	-1.35E-02	9.80E-01	-1.66E-02	-1.96E-02	1.39E-02	1.45E-03	2.15E-03	1.09E-02
1.38E-02	2.84E-03	1.79E-02	8.91E-04	-1.03E-02	-2.93E-02	9.85E-01	-7.65E-03	2.36E-02	3.85E-03	-4.51E-03	4.27E-03
9.17E-03	-3.01E-03	3.27E-02	5.27E-03	-7.18E-03	-3.92E-02	-1.79E-02	9.95E-01	3.22E-02	5.05E-03	-1.64E-02	-4.65E-03
-1.05E-02	-1.97E-02	-5.04E-03	-1.48E-03	1.37E-02	3.66E-03	1.10E-02	2.18E-02	1.00E 00	8.67E-04	-1.31E-02	-1.75E-02
-8.34E-03	-1.70E-02	-3.15E-03	-1.18E-03	1.13E-02	1.37E-03	8.66E-03	1.85E-02	1.67E-03	1.00E 00	-1.17E-02	-1.50E-02
-9.73E-03	-1.04E-02	-3.27E-02	-7.45E-03	1.27E-02	3.09E-02	2.05E-02	1.88E-02	-2.30E-02	-2.79E-03	1.01E 00	-5.29E-03
-6.77E-03	-6.75E-03	-4.31E-02	-1.05E-02	1.08E-02	3.80E-02	2.26E-02	1.74E-02	-2.91E-02	-3.64E-03	1.48E-02	1.00E 00

C MATRIX BY ROWS

-1,59E-02	-3,13E-02	-5,51E-02	-1,51E-02	2,64E-02	4,24E-02	3,67E-02	4,57E-02	-2,83E-02	-2,18E-03	1,80E-03	-1,85E-02
-1,87E-02	-2,70E-02	-4,52E-02	-1,08E-02	2,52E-02	4,08E-02	3,33E-02	3,90E-02	-2,82E-02	-2,76E-03	-3,09E-04	-1,85E-02
7,12E-03	3,39E-02	4,78E-02	1,64E-02	-2,20E-02	-2,39E-02	-2,94E-02	-4,64E-02	1,26E-02	-7,40E-04	2,31E-03	1,83E-02
1,32E-02	4,74E-02	4,25E-02	1,54E-02	-2,99E-02	-1,82E-02	-3,28E-02	-5,92E-02	5,81E-03	-2,25E-03	1,52E-02	3,15E-02
1,05E-02	1,45E-03	4,73E-03	-1,79E-03	-6,59E-03	-1,57E-02	-7,79E-03	-3,00E-03	1,29E-02	2,34E-03	2,86E-04	4,41E-03
1,12E-02	1,41E-02	1,99E-02	4,22E-03	-1,35E-02	-2,01E-02	-1,66E-02	-1,96E-02	1,39E-02	1,45E-03	2,15E-03	1,09E-02
1,38E-02	2,84E-03	1,79E-02	8,91E-04	-1,03E-02	-2,93E-02	-1,53E-02	-7,65E-03	2,36E-02	3,85E-03	-4,51E-03	4,27E-03
9,17E-03	-3,01E-03	3,27E-02	5,27E-03	-7,18E-03	-3,92E-02	-1,79E-02	-4,96E-03	3,22E-02	5,05E-03	-1,64E-02	-4,65E-03
-1,05E-02	-1,97E-02	-5,04E-03	-1,48E-03	1,37E-02	3,66E-03	1,10E-02	2,18E-02	2,37E-04	8,67E-04	-1,31E-02	-1,75E-02
-8,34E-03	-1,70E-02	-3,15E-03	-1,18E-03	1,13E-02	1,37E-03	8,66E-03	1,85E-02	1,67E-03	9,88E-04	-1,17E-02	-1,50E-02
-9,73E-03	-1,04E-02	-3,27E-02	-7,45E-03	1,27E-02	3,09E-02	2,05E-02	1,88E-02	-2,30E-02	-2,79E-03	6,74E-03	-5,29E-03
-6,77E-03	-6,75E-03	-4,31E-02	-1,05E-02	1,08E-02	3,80E-02	2,26E-02	1,74E-02	-2,91E-02	-3,64E-03	1,48E-02	5,68E-04

A* MATRIX BY ROWS

1,11E 00	1,54E-01	-1,04E-01	-7,70E-02	-2,80E-01	4,68E-02	-1,67E-01	-3,66E-01	-1,16E-01	2,84E-02	1,94E-01	2,22E-01
1,87E-01	1,25E 00	2,23E-01	-2,29E-01	-3,14E-01	-2,58E-01	-1,65E-01	-3,80E-01	1,02E-01	-7,15E-02	8,95E-02	2,35E-01
-8,37E-02	-3,08E-01	1,21E 00	-3,34E-01	1,72E-01	-4,22E-01	-1,02E-01	1,77E-01	3,00E-01	-2,32E-02	-3,21E-01	-2,43E-01
-3,14E-01	-2,68E-02	-8,62E-02	1,23E 00	-1,39E-01	2,24E-01	2,53E-02	-7,86E-02	-3,61E-01	6,23E-02	-1,89E-01	-3,46E-01
3,76E-04	-2,06E-01	-3,25E-01	1,47E-02	1,14E 00	3,69E-02	9,24E-02	-5,29E-02	1,58E-02	-2,24E-01	-1,54E-01	6,13E-02
-3,50E-01	-6,92E-02	-1,32E-01	-3,46E-03	-4,50E-02	1,14E 00	-3,26E-02	9,88E-02	-2,90E-01	1,59E-01	3,66E-04	-1,12E-01
-6,08E-02	-1,05E-01	-2,45E-01	-9,46E-02	-1,12E-01	4,06E-01	1,18E 00	-2,22E-01	-3,54E-01	-2,27E-01	1,51E-01	-1,51E-01
-8,04E-02	-2,88E-01	-3,52E-01	-2,57E-01	1,16E-01	-6,54E-02	1,65E-01	1,29E 00	-1,60E-01	3,99E-02	-1,18E-01	-2,52E-01
1,54E-01	-1,68E-01	-1,47E-01	-1,08E-01	-1,61E-01	-2,42E-01	-1,68E-01	1,42E-01	1,16E 00	-2,24E-01	-1,76E-02	5,72E-02
-5,32E-03	-1,66E-01	-2,12E-01	-1,07E-01	8,63E-02	-2,91E-01	-2,31E-01	6,80E-02	4,57E-02	1,09E 00	7,25E-02	-1,45E-02
2,48E-02	4,81E-02	-1,95E-01	9,48E-02	-2,84E-01	9,22E-02	-3,66E-01	6,41E-02	-2,35E-02	4,69E-02	1,09E 00	-2,37E-01
1,21E-01	2,12E-01	1,87E-01	1,38E-01	-5,19E-02	-2,36E-01	-2,79E-02	-5,62E-01	-5,69E-02	-1,58E-01	3,14E-02	1,15E 00

A INVERSE*A

9,98E-01	-5,46E-05	-3,01E-03	-7,17E-05	1,58E-03	5,24E-03	2,51E-03	8,55E-04	-4,30E-03	-7,27E-04	1,06E-03	-4,20E-04
-2,32E-03	9,99E-01	-3,39E-03	-2,71E-04	1,82E-03	5,16E-03	2,74E-03	1,49E-03	-4,13E-03	-6,57E-04	8,64E-04	-7,23E-04
1,79E-03	-5,66E-04	1,00E 00	-3,31E-06	-9,94E-04	-4,56E-03	-1,89E-03	-7,25E-05	3,85E-03	6,78E-04	-1,33E-03	-1,52E-04
2,51E-03	1,79E-04	5,08E-03	1,00E 00	-1,94E-03	-6,99E-03	-3,47E-03	-1,48E-03	5,67E-03	9,01E-04	-1,93E-03	1,84E-04
7,50E-04	8,60E-04	1,34E-03	2,71E-04	9,99E-01	-1,41E-03	-1,10E-03	-1,23E-03	9,99E-04	1,13E-04	7,79E-05	6,70E-04
1,27E-03	5,41E-04	2,14E-03	2,63E-04	-1,11E-03	9,97E-01	-1,66E-03	-1,11E-03	2,28E-03	3,43E-04	-4,52E-04	5,01E-04
1,12E-03	8,20E-04	1,32E-03	1,43E-04	-1,05E-03	-1,87E-03	9,99E-01	-1,20E-03	1,40E-03	1,96E-04	1,14E-04	7,95E-04
7,84E-04	-3,52E-05	-6,77E-04	-4,34E-04	-3,27E-04	-4,51E-04	-1,31E-04	1,00E 00	4,25E-04	1,20E-04	4,10E-04	4,22E-04
-1,25E-03	-8,89E-04	-3,39E-03	-6,62E-04	1,37E-03	3,63E-03	2,22E-03	1,76E-03	9,97E-01	-3,75E-04	8,02E-04	-5,08E-04
-1,03E-03	-7,35E-04	-2,89E-03	-5,73E-04	1,14E-03	3,06E-03	1,87E-03	1,47E-03	-2,34E-03	1,00E-00	7,06E-04	-4,00E-04
-1,19E-03	-4,49E-05	-9,16E-04	1,23E-04	7,43E-04	2,16E-03	1,02E-03	3,07E-04	-1,79E-03	-3,17E-04	1,00E 00	-3,41E-04
-9,87E-04	5,28E-04	4,02E-04	5,11E-04	2,73E-04	1,25E-03	2,69E-04	-6,00E-04	-1,17E-03	-2,72E-04	4,08E-05	1,00E-00

C MATRIX BY ROWS

-2.35E-03	-5.46E-05	-3.01E-03	-7.17E-05	1.58E-03	5.24E-03	2.51E-03	8.55E-04	-4.30E-03	-7.27E-04	1.06E-03	-4.20E-04
-2.32E-03	-5.85E-04	-3.39E-03	-2.71E-04	1.82E-03	5.16E-03	2.74E-03	1.49E-03	-4.13E-03	-6.57E-04	8.64E-04	-7.23E-04
1.79E-03	-5.66E-04	2.49E-03	-3.31E-06	-9.94E-04	-4.56E-03	-1.89E-03	-7.25E-05	3.85E-03	6.78E-04	-1.33E-03	-1.52E-04
2.51E-03	1.79E-04	5.08E-03	5.92E-04	-1.94E-03	-6.99E-03	-3.47E-03	-1.48E-03	5.67E-03	9.01E-04	-1.93E-03	1.84E-04
7.50E-04	8.60E-04	1.34E-03	2.71E-04	-8.73E-04	-1.41E-03	-1.10E-03	-1.23E-03	9.99E-04	1.13E-04	7.79E-05	6.70E-04
1.27E-03	5.41E-04	2.14E-03	2.63E-04	-1.11E-03	-2.90E-03	-1.66E-03	-1.11E-03	2.28E-03	3.43E-04	-4.52E-04	5.01E-04
1.12E-03	8.20E-04	1.32E-03	1.43E-04	-1.05E-03	-1.87E-03	-1.28E-03	-1.20E-03	1.40E-03	1.96E-04	1.14E-04	7.95E-04
7.84E-04	-3.52E-05	-6.77E-04	-4.34E-04	-3.27E-04	-4.51E-04	-1.31E-04	1.66E-04	4.25E-04	1.20E-04	4.10E-04	4.22E-04
-1.25E-03	-8.89E-04	-3.39E-03	-6.62E-04	1.37E-03	3.63E-03	2.22E-03	1.76E-03	-2.78E-03	-3.75E-04	8.02E-04	-5.08E-04
-1.03E-03	-7.35E-04	-2.89E-03	-5.73E-04	1.14E-03	3.06E-03	1.87E-03	1.47E-03	-2.34E-03	-3.15E-04	7.06E-04	-4.00E-04
-1.19E-03	-4.49E-05	-9.16E-04	1.23E-04	7.43E-04	2.16E-03	1.02E-03	3.07E-04	-1.79E-03	-3.17E-04	2.34E-04	-3.41E-04
-9.87E-04	5.28E-04	4.02E-04	5.11E-04	2.73E-04	1.25E-03	2.69E-04	-6.00E-04	-1.17E-03	-2.72E-04	4.08E-05	-9.63E-05

A* MATRIX BY ROWS

1.11E 00	1.54E-01	-1.09E-01	-7.69E-02	-2.77E-01	5.55E-02	-1.63E-01	-3.65E-01	-1.23E-01	2.72E-02	1.95E-01	2.21E-01
1.82E-01	1.25E 00	2.17E-01	-2.29E-01	-3.10E-01	-2.48E-01	-1.60E-01	-3.77E-01	9.40E-02	-7.28E-02	9.09E-02	2.33E-01
-8.16E-02	-3.09E-01	1.22E 00	-3.35E-01	1.71E-01	-4.26E-01	-1.04E-01	1.78E-01	3.04E-01	-2.24E-02	-3.22E-01	-2.43E-01
-3.09E-01	-2.63E-02	-7.77E-02	1.23E 00	-1.43E-01	2.12E-01	1.91E-02	-8.12E-02	-3.51E-01	6.39E-02	-1.92E-01	-3.46E-01
1.60E-03	-2.05E-01	-3.23E-01	1.52E-02	1.14E 00	3.45E-02	9.05E-02	-5.51E-02	1.75E-02	-2.24E-01	-1.54E-01	6.25E-02
-3.47E-01	-6.85E-02	-1.28E-01	-3.14E-03	-4.70E-02	1.13E 00	-3.56E-02	9.71E-02	-2.85E-01	1.60E-01	-4.88E-04	-1.11E-01
-5.89E-02	-1.03E-01	-2.42E-01	-9.40E-02	-1.14E-01	4.02E-01	1.18E 00	-2.25E-01	-3.51E-01	-2.26E-01	1.51E-01	-1.50E-01
-7.91E-02	-2.87E-01	-3.53E-01	-2.58E-01	1.16E-01	-6.58E-02	1.64E-01	1.29E 00	-1.60E-01	4.00E-02	-1.17E-01	-2.51E-01
1.52E-01	-1.69E-01	-1.52E-01	-1.09E-01	-1.59E-01	-2.36E-01	-1.65E-01	1.45E-01	1.16E 00	-2.25E-01	-1.62E-02	5.65E-02
-7.33E-03	-1.67E-01	-2.16E-01	-1.08E-01	8.82E-02	-2.86E-01	-2.28E-01	7.01E-02	4.14E-02	1.09E 00	7.38E-02	-1.50E-02
2.30E-02	4.75E-02	-1.98E-01	9.47E-02	-2.83E-01	9.58E-02	-3.64E-01	6.53E-02	-2.63E-02	4.64E-02	1.09E 00	-2.38E-01
1.19E-01	2.13E-01	1.88E-01	1.39E-01	-5.12E-02	-2.34E-01	-2.74E-02	-5.63E-01	-5.85E-02	-1.58E-01	3.10E-02	1.15E 00

A INVERSE*A

9.95E-01	-9.71E-05	-6.00E-03	-1.38E-04	3.15E-03	1.04E-02	4.99E-03	1.69E-03	-8.58E-03	-1.45E-03	2.11E-03	-8.31E-04
-4.63E-03	9.99E-01	-6.75E-03	-5.38E-04	3.62E-03	1.03E-02	5.46E-03	2.95E-03	-8.23E-03	-1.31E-03	1.73E-03	-1.44E-03
3.58E-03	-1.14E-03	1.00E 00	-1.15E-05	-1.98E-03	-9.10E-03	-3.76E-03	-1.29E-04	7.68E-03	1.35E-03	-2.65E-03	-3.11E-04
4.99E-03	3.42E-04	1.01E-02	1.00E 00	-3.85E-03	-1.39E-02	-6.91E-03	-2.93E-03	1.13E-02	1.80E-03	-3.86E-03	3.55E-04
1.49E-03	1.72E-03	2.68E-03	5.42E-04	9.98E-01	-2.81E-03	-2.20E-03	-2.45E-03	1.99E-03	2.24E-04	1.56E-04	1.34E-03
2.53E-03	1.07E-03	4.26E-03	5.24E-04	-2.21E-03	9.94E-01	-3.30E-03	-2.21E-03	4.54E-03	6.84E-04	-9.04E-04	9.96E-04
2.22E-03	1.64E-03	2.63E-03	2.84E-04	-2.09E-03	-3.72E-03	9.97E-01	-2.38E-03	2.78E-03	3.89E-04	2.29E-04	1.58E-03
1.56E-03	-7.11E-05	-1.36E-03	-8.68E-04	-6.49E-04	-8.86E-04	-2.55E-04	1.00E 00	8.38E-04	2.38E-04	8.24E-04	8.42E-04
-2.49E-03	-1.77E-03	-6.76E-03	-1.32E-03	2.73E-03	7.25E-03	4.43E-03	3.50E-03	9.94E-01	-7.49E-04	1.60E-03	-1.01E-03
-2.04E-03	-1.46E-03	-5.76E-03	-1.14E-03	2.26E-03	6.11E-03	3.73E-03	2.94E-03	-4.67E-03	9.99E-01	1.41E-03	-7.92E-04
-2.37E-03	-8.49E-05	-1.82E-03	2.48E-04	1.48E-03	4.30E-03	2.03E-03	6.05E-04	-3.56E-03	-6.32E-04	1.00E 00	-6.78E-04
-1.97E-03	1.06E-03	8.18E-04	1.02E-03	5.39E-04	2.48E-03	5.28E-04	-1.21E-03	-2.33E-03	-5.42E-04	7.75E-05	1.00E-00

C MATRIX BY ROWS

-4.67E-03	-9.71E-05	-6.00E-03	-1.38E-04	3.15E-03	1.04E-02	4.99E-03	1.69E-03	-8.58E-03	-1.45E-03	2.11E-03	-8.31E-04
-4.63E-03	-1.16E-03	-6.75E-03	-5.38E-04	3.62E-03	1.03E-02	5.46E-03	2.95E-03	-8.23E-03	-1.31E-03	1.73E-03	-1.44E-03
3.58E-03	-1.14E-03	4.95E-03	-1.15E-05	-1.98E-03	-9.10E-03	-3.76E-03	-1.29E-04	7.68E-03	1.35E-03	-2.65E-03	-3.11E-04
4.99E-03	3.42E-04	1.01E-02	1.18E-03	-3.85E-03	-1.39E-02	-6.91E-03	-2.93E-03	1.13E-02	1.80E-03	-3.86E-03	3.55E-04
1.49E-03	1.72E-03	2.68E-03	5.42E-04	-1.74E-03	-2.81E-03	-2.20E-03	-2.45E-03	1.99E-03	2.24E-04	1.56E-04	1.34E-03
2.53E-03	1.07E-03	4.26E-03	5.24E-04	-2.21E-03	-5.78E-03	-3.30E-03	-2.21E-03	4.54E-03	6.84E-04	-9.04E-04	9.96E-04
2.22E-03	1.64E-03	2.63E-03	2.84E-04	-2.09E-03	-3.72E-03	-2.55E-03	-2.38E-03	2.78E-03	3.89E-04	2.29E-04	1.58E-03
1.56E-03	-7.11E-05	-1.36E-03	-8.68E-04	-6.49E-04	-8.86E-04	-2.55E-04	3.36E-04	8.38E-04	2.38E-04	8.24E-04	8.42E-04
-2.49E-03	-1.77E-03	-6.76E-03	-1.32E-03	2.73E-03	7.25E-03	4.43E-03	3.50E-03	-5.55E-03	-7.49E-04	1.60E-03	-1.01E-03
-2.04E-03	-1.46E-03	-5.76E-03	-1.14E-03	2.26E-03	6.11E-03	3.73E-03	2.94E-03	-4.67E-03	-6.29E-04	1.41E-03	-7.92E-04
-2.37E-03	-8.49E-05	-1.82E-03	2.48E-04	1.48E-03	4.30E-03	2.03E-03	6.05E-04	-3.56E-03	-6.32E-04	4.64E-04	-6.78E-04
-1.97E-03	1.06E-03	8.18E-04	1.02E-03	5.39E-04	2.48E-03	5.28E-04	-1.21E-03	-2.33E-03	-5.42E-04	7.75E-05	-1.91E-04

A* MATRIX BY ROWS

1.12E 00	1.54E-01	-9.97E-02	-7.72E-02	-2.83E-01	3.82E-02	-1.71E-01	-3.68E-01	-1.09E-01	2.96E-02	1.92E-01	2.23E-01
1.92E-01	1.25E 00	2.29E-01	-2.28E-01	-3.17E-01	-2.69E-01	-1.71E-01	-3.83E-01	1.10E-01	-7.02E-02	8.81E-02	2.36E-01
-8.58E-02	-3.07E-01	1.21E 00	-3.34E-01	1.73E-01	-4.18E-01	-1.01E-01	1.77E-01	2.97E-01	-2.39E-02	-3.20E-01	-2.43E-01
-3.18E-01	-2.71E-02	-9.45E-02	1.23E 00	-1.36E-01	2.37E-01	3.13E-02	-7.61E-02	-3.71E-01	6.07E-02	-1.86E-01	-3.47E-01
-8.12E-04	-2.08E-01	-3.28E-01	1.41E-02	1.14E 00	3.92E-02	9.44E-02	-5.07E-02	1.42E-02	-2.24E-01	-1.54E-01	6.02E-02
-3.52E-01	-7.00E-02	-1.36E-01	-3.77E-03	-4.31E-02	1.14E 00	-2.97E-02	1.01E-01	-2.94E-01	1.59E-01	1.21E-03	-1.13E-01
-6.27E-02	-1.07E-01	-2.49E-01	-9.53E-02	-1.10E-01	4.10E-01	1.19E 00	-2.20E-01	-3.57E-01	-2.27E-01	1.51E-01	-1.52E-01
-8.17E-02	-2.88E-01	-3.51E-01	-2.57E-01	1.17E-01	-6.51E-02	1.65E-01	1.30E 00	-1.60E-01	3.98E-02	-1.19E-01	-2.53E-01
1.56E-01	-1.67E-01	-1.42E-01	-1.07E-01	-1.63E-01	-2.48E-01	-1.72E-01	1.40E-01	1.17E 00	-2.24E-01	-1.89E-02	5.79E-02
-3.36E-03	-1.65E-01	-2.07E-01	-1.07E-01	8.44E-02	-2.97E-01	-2.34E-01	6.59E-02	5.01E-02	1.09E 00	7.12E-02	-1.39E-02
2.66E-02	4.86E-02	-1.93E-01	9.49E-02	-2.86E-01	8.88E-02	-3.68E-01	6.30E-02	-2.08E-02	4.73E-02	1.09E 00	-2.36E-01
1.23E-01	2.12E-01	1.86E-01	1.37E-01	-5.26E-02	-2.38E-01	-2.84E-02	-5.61E-01	-5.54E-02	-1.58E-01	3.19E-02	1.15E 00

A INVERSE*A

1.00E-00	-4.83E-05	-1.23E-04	-2.04E-05	6.68E-05	1.47E-04	9.45E-05	8.11E-05	-1.11E-04	-1.52E-05	1.49E-05	-3.83E-05
-7.03E-05	1.00E-00	-1.19E-04	-1.84E-05	6.93E-05	1.48E-04	9.55E-05	8.22E-05	-1.12E-04	-1.55E-05	1.12E-05	-4.20E-05
4.34E-05	3.97E-05	1.00E 00	1.94E-05	-4.88E-05	-1.05E-04	-7.06E-05	-6.55E-05	7.79E-05	9.93E-06	-1.24E-05	2.76E-05
6.73E-05	6.67E-05	1.34E-04	1.00E 00	-7.57E-05	-1.44E-04	-1.03E-04	-1.03E-04	1.05E-04	1.30E-05	-6.71E-06	5.01E-05
2.95E-05	1.69E-05	3.48E-05	2.91E-06	1.00E-00	-5.26E-05	-3.30E-05	-2.66E-05	4.03E-05	6.02E-06	0	1.76E-05
4.02E-05	2.93E-05	6.44E-05	9.60E-06	-3.95E-05	1.00E-00	-5.32E-05	-4.68E-05	6.10E-05	8.43E-06	-4.10E-06	2.53E-05
4.05E-05	2.04E-05	5.35E-05	5.06E-06	-3.50E-05	-7.86E-05	1.00E-00	-3.51E-05	6.10E-05	9.20E-06	-5.18E-06	2.10E-05
2.56E-05	2.32E-06	3.89E-05	2.68E-06	-1.86E-05	-6.09E-05	-3.02E-05	1.00E-00	4.95E-05	8.10E-06	-1.32E-05	4.70E-06
-4.04E-05	-3.87E-05	-6.32E-05	-1.09E-05	4.31E-05	7.39E-05	5.43E-05	5.62E-05	1.00E-00	-6.70E-06	-3.18E-06	-3.24E-05
-3.29E-05	-3.26E-05	-5.19E-05	-9.16E-06	3.56E-05	5.98E-05	4.46E-05	4.70E-05	-4.31E-05	1.00E-00	-3.16E-06	-2.71E-05
-3.52E-05	-1.94E-05	-6.14E-05	-8.63E-06	3.26E-05	7.90E-05	4.75E-05	3.57E-05	-6.11E-05	-8.87E-06	1.00E 00	-1.66E-05
-2.58E-05	-7.62E-06	-5.27E-05	-7.20E-06	2.22E-05	6.85E-05	3.69E-05	2.12E-05	-5.44E-05	-8.29E-06	1.60E-05	1.00E-00

C MATRIX BY ROWS

-6.61E-05	-4.83E-05	-1.23E-04	-2.04E-05	6.68E-05	1.47E-04	9.45E-05	8.11E-05	-1.11E-04	-1.52E-05	1.49E-05	-3.83E-05
-7.03E-05	-5.01E-05	-1.19E-04	-1.84E-05	6.93E-05	1.48E-04	9.55E-05	8.22E-05	-1.12E-04	-1.55E-05	1.12E-05	-4.20E-05
4.34E-05	3.97E-05	9.83E-05	1.94E-05	-4.88E-05	-1.05E-04	-7.06E-05	-6.55E-05	7.79E-05	9.93E-06	-1.24E-05	2.76E-05
6.73E-05	6.67E-05	1.34E-04	2.60E-05	-7.57E-05	-1.44E-04	-1.03E-04	-1.03E-04	1.05E-04	1.30E-05	-6.71E-06	5.01E-05
2.95E-05	1.69E-05	3.48E-05	2.91E-06	-2.58E-05	-5.26E-05	-3.30E-05	-2.66E-05	4.03E-05	6.02E-06	0	1.76E-05
4.02E-05	2.93E-05	6.44E-05	9.60E-06	-3.95E-05	-8.10E-05	-5.32E-05	-4.68E-05	6.10E-05	8.43E-06	-4.10E-06	2.53E-05
4.05E-05	2.04E-05	5.35E-05	5.06E-06	-3.50E-05	-7.86E-05	-4.72E-05	-3.51E-05	6.10E-05	9.20E-06	-5.18E-06	2.10E-05
2.56E-05	2.32E-06	3.89E-05	2.68E-06	-1.86E-05	-6.09E-05	-3.02E-05	-1.25E-05	4.95E-05	8.10E-06	-1.32E-05	4.70E-06
-4.04E-05	-3.87E-05	-6.32E-05	-1.09E-05	4.31E-05	7.39E-05	5.43E-05	5.62E-05	-5.36E-05	-6.70E-06	-3.18E-06	-3.24E-05
-3.29E-05	-3.26E-05	-5.19E-05	-9.16E-06	3.56E-05	5.98E-05	4.46E-05	4.70E-05	-4.31E-05	-5.29E-06	-3.16E-06	-2.71E-05
-3.52E-05	-1.94E-05	-6.14E-05	-8.63E-06	3.26E-05	7.90E-05	4.75E-05	3.57E-05	-6.11E-05	-8.87E-06	1.04E-05	-1.66E-05
-2.58E-05	-7.62E-06	-5.27E-05	-7.20E-06	2.22E-05	6.85E-05	3.69E-05	2.12E-05	-5.44E-05	-8.29E-06	1.60E-05	-5.99E-06

A* MATRIX BY ROWS

1.12E 00	1.54E-01	-9.99E-02	-7.72E-02	-2.83E-01	3.85E-02	-1.71E-01	-3.67E-01	-1.09E-01	2.96E-02	1.92E-01	2.23E-01
1.92E-01	1.25E 00	2.29E-01	-2.28E-01	-3.17E-01	-2.68E-01	-1.70E-01	-3.83E-01	1.10E-01	-7.02E-02	8.82E-02	2.36E-01
-8.58E-02	-3.07E-01	1.21E 00	-3.34E-01	1.73E-01	-4.18E-01	-1.01E-01	1.77E-01	2.97E-01	-2.39E-02	-3.20E-01	-2.43E-01
-3.18E-01	-2.70E-02	-9.43E-02	1.23E 00	-1.36E-01	2.36E-01	3.11E-02	-7.63E-02	-3.70E-01	6.07E-02	-1.86E-01	-3.47E-01
-7.62E-04	-2.08E-01	-3.28E-01	1.41E-02	1.14E 00	3.92E-02	9.43E-02	-5.07E-02	1.43E-02	-2.24E-01	-1.54E-01	6.02E-02
-3.52E-01	-6.99E-02	-1.35E-01	-3.76E-03	-4.32E-02	1.14E 00	-2.98E-02	1.00E-01	-2.94E-01	1.59E-01	1.20E-03	-1.13E-01
-6.26E-02	-1.07E-01	-2.48E-01	-9.52E-02	-1.10E-01	4.09E-01	1.19E 00	-2.20E-01	-3.57E-01	-2.27E-01	1.51E-01	-1.52E-01
-8.17E-02	-2.88E-01	-3.51E-01	-2.57E-01	1.17E-01	-6.52E-02	1.65E-01	1.29E 00	-1.60E-01	3.98E-02	-1.19E-01	-2.53E-01
1.56E-01	-1.67E-01	-1.42E-01	-1.07E-01	-1.63E-01	-2.48E-01	-1.71E-01	1.40E-01	1.17E 00	-2.24E-01	-1.89E-02	5.79E-02
-3.42E-03	-1.65E-01	-2.07E-01	-1.07E-01	8.45E-02	-2.97E-01	-2.34E-01	6.60E-02	5.00E-02	1.09E 00	7.12E-02	-1.39E-02
2.65E-02	4.86E-02	-1.93E-01	9.49E-02	-2.85E-01	8.89E-02	-3.68E-01	6.31E-02	-2.09E-02	4.73E-02	1.09E 00	-2.36E-01
1.23E-01	2.12E-01	1.86E-01	1.37E-01	-5.25E-02	-2.38E-01	-2.83E-02	-5.61E-01	-5.55E-02	-1.58E-01	3.19E-02	1.15E 00

A INVERSE*A

1.00E-00	-9.65E-05	-2.46E-04	-4.08E-05	1.34E-04	2.93E-04	1.89E-04	1.62E-04	-2.22E-04	-3.04E-05	2.98E-05	-7.66E-05
-1.41E-04	1.00E-00	-2.39E-04	-3.67E-05	1.39E-04	2.95E-04	1.91E-04	1.64E-04	-2.23E-04	-3.09E-05	2.24E-05	-8.41E-05
8.68E-05	7.93E-05	1.00E 00	3.88E-05	-9.76E-05	-2.10E-04	-1.41E-04	-1.31E-04	1.56E-04	1.99E-05	-2.49E-05	5.52E-05
1.35E-04	1.33E-04	2.67E-04	1.00E 00	-1.51E-04	-2.88E-04	-2.05E-04	-2.05E-04	2.11E-04	2.60E-05	-1.34E-05	1.00E-04
5.89E-05	3.38E-05	6.95E-05	5.82E-06	1.00E-00	-1.05E-04	-6.60E-05	-5.33E-05	8.06E-05	1.20E-05	0	3.51E-05
8.04E-05	5.87E-05	1.29E-04	1.92E-05	-7.90E-05	1.00E-00	-1.06E-04	-9.37E-05	1.22E-04	1.69E-05	-8.19E-06	5.06E-05
8.09E-05	4.08E-05	1.07E-04	1.01E-05	-7.00E-05	-1.57E-04	1.00E-00	-7.02E-05	1.22E-04	1.84E-05	-1.04E-05	4.20E-05
5.12E-05	4.64E-06	7.78E-05	5.35E-06	-3.72E-05	-1.22E-04	-6.03E-05	1.00E-00	9.90E-05	1.62E-05	-2.64E-05	9.40E-06
-8.07E-05	-7.74E-05	-1.26E-04	-2.17E-05	8.62E-05	1.48E-04	1.09E-04	1.12E-04	1.00E-00	-1.34E-05	-6.36E-06	-6.47E-05
-6.58E-05	-6.53E-05	-1.04E-04	-1.83E-05	7.12E-05	1.20E-04	8.93E-05	9.40E-05	-8.62E-05	1.00E-00	-6.32E-06	-5.41E-05
-7.03E-05	-3.88E-05	-1.23E-04	-1.73E-05	6.53E-05	1.58E-04	9.49E-05	7.14E-05	-1.22E-04	-1.77E-05	1.00E 00	-3.32E-05
-5.16E-05	-1.52E-05	-1.05E-04	-1.44E-05	4.45E-05	1.37E-04	7.38E-05	4.24E-05	-1.09E-04	-1.66E-05	3.19E-05	1.00E-00

C MATRIX BY ROWS

-1.32E-04	-9.65E-05	-2.46E-04	-4.08E-05	1.34E-04	2.93E-04	1.89E-04	1.62E-04	-2.22E-04	-3.04E-05	2.98E-05	-7.66E-05
-1.41E-04	-1.00E-04	-2.39E-04	-3.67E-05	1.39E-04	2.95E-04	1.91E-04	1.64E-04	-2.23E-04	-3.09E-05	2.24E-05	-8.41E-05
8.68E-05	7.93E-05	1.97E-04	3.88E-05	-9.76E-05	-2.10E-04	-1.41E-04	-1.31E-04	1.56E-04	1.99E-05	-2.49E-05	5.52E-05
1.35E-04	1.33E-04	2.67E-04	5.20E-05	-1.51E-04	-2.88E-04	-2.05E-04	-2.05E-04	2.11E-04	2.60E-05	-1.34E-05	1.00E-04
5.89E-05	3.38E-05	6.95E-05	5.82E-06	-5.17E-05	-1.05E-04	-6.60E-05	-5.33E-05	8.06E-05	1.20E-05	0	3.51E-05
8.04E-05	5.87E-05	1.29E-04	1.92E-05	-7.90E-05	-1.62E-04	-1.06E-04	-9.37E-05	1.22E-04	1.69E-05	-8.19E-06	5.06E-05
8.09E-05	4.08E-05	1.07E-04	1.01E-05	-7.00E-05	-1.57E-04	-9.45E-05	-7.02E-05	1.22E-04	1.84E-05	-1.04E-05	4.20E-05
5.12E-05	4.64E-06	7.78E-05	5.35E-06	-3.72E-05	-1.22E-04	-6.03E-05	-2.50E-05	9.90E-05	1.62E-05	-2.64E-05	9.40E-06
-8.07E-05	-7.74E-05	-1.26E-04	-2.17E-05	8.62E-05	1.48E-04	1.09E-04	1.12E-04	-1.07E-04	-1.34E-05	-6.36E-06	-6.47E-05
-6.58E-05	-6.53E-05	-1.04E-04	-1.83E-05	7.12E-05	1.20E-04	8.93E-05	9.40E-05	-8.62E-05	-1.06E-05	-6.32E-06	-5.41E-05
-7.03E-05	-3.88E-05	-1.23E-04	-1.73E-05	6.53E-05	1.58E-04	9.49E-05	7.14E-05	-1.22E-04	-1.77E-05	2.08E-05	-3.32E-05
-5.16E-05	-1.52E-05	-1.05E-04	-1.44E-05	4.45E-05	1.37E-04	7.38E-05	4.24E-05	-1.09E-04	-1.66E-05	3.19E-05	-1.20E-05

A* MATRIX BY ROWS

1.12E 00	1.54E-01	-9.95E-02	-7.71E-02	-2.83E-01	3.79E-02	-1.72E-01	-3.68E-01	-1.09E-01	2.97E-02	1.92E-01	2.23E-01
1.92E-01	1.25E 00	2.30E-01	-2.28E-01	-3.17E-01	-2.69E-01	-1.71E-01	-3.83E-01	1.11E-01	-7.02E-02	8.81E-02	2.36E-01
-8.59E-02	-3.07E-01	1.21E 00	-3.34E-01	1.73E-01	-4.17E-01	-1.01E-01	1.77E-01	2.97E-01	-2.39E-02	-3.20E-01	-2.43E-01
-3.18E-01	-2.72E-02	-9.48E-02	1.23E 00	-1.36E-01	2.37E-01	3.15E-02	-7.59E-02	-3.71E-01	6.07E-02	-1.86E-01	-3.47E-01
-8.62E-04	-2.08E-01	-3.28E-01	1.41E-02	1.14E 00	3.93E-02	9.44E-02	-5.06E-02	1.41E-02	-2.24E-01	-1.54E-01	6.02E-02
-3.52E-01	-7.00E-02	-1.36E-01	-3.79E-03	-4.30E-02	1.14E 00	-2.96E-02	1.01E-01	-2.94E-01	1.59E-01	1.22E-03	-1.13E-01
-6.28E-02	-1.07E-01	-2.49E-01	-9.53E-02	-1.10E-01	4.10E-01	1.19E 00	-2.20E-01	-3.57E-01	-2.27E-01	1.51E-01	-1.52E-01
-8.18E-02	-2.88E-01	-3.51E-01	-2.57E-01	1.17E-01	-6.50E-02	1.65E-01	1.30E 00	-1.60E-01	3.98E-02	-1.19E-01	-2.53E-01
1.56E-01	-1.67E-01	-1.42E-01	-1.07E-01	-1.63E-01	-2.48E-01	-1.72E-01	1.40E-01	1.17E 00	-2.24E-01	-1.89E-02	5.80E-02
-3.29E-03	-1.65E-01	-2.07E-01	-1.07E-01	8.44E-02	-2.97E-01	-2.34E-01	6.58E-02	5.01E-02	1.09E 00	7.12E-02	-1.39E-02
2.66E-02	4.86E-02	-1.93E-01	9.49E-02	-2.86E-01	8.87E-02	-3.68E-01	6.29E-02	-2.07E-02	4.73E-02	1.09E 00	-2.36E-01
1.23E-01	2.12E-01	1.86E-01	1.37E-01	-5.26E-02	-2.38E-01	-2.85E-02	-5.61E-01	-5.52E-02	-1.58E-01	3.18E-02	1.15E 00

A INVERSE*A

1.00E-00	0	0	0	0	0	0	0	0	0	0	0
0	1.00E-00	0	0	0	0	0	0	0	0	0	0
0	0	1.00E 00	0	0	0	0	0	0	0	0	0
0	0	0	1.00E 00	0	0	0	0	0	0	0	0
0	0	0	0	1.00E-00	0	0	0	0	0	0	0
0	0	0	0	0	1.00E-00	0	0	0	0	0	0
0	0	0	0	0	0	1.00E-00	0	0	0	0	0
0	0	0	0	0	0	0	1.00E-00	0	0	0	0
0	0	0	0	0	0	0	0	1.00E-00	0	0	0
0	0	0	0	0	0	0	0	0	1.00E-00	0	0
0	0	0	0	0	0	0	0	0	0	1.00E 00	0
0	0	0	0	0	0	0	0	0	0	0	1.00E-00