

NAME :

Type of Calculator :

Consider the matrix $A = \begin{bmatrix} 9.604\text{E}-01 & 2.737\text{E}-01 & 9.521\text{E}-01 \\ 6.833\text{E}-01 & 1.180\text{E}-01 & 7.096\text{E}-01 \\ 5.176\text{E}-01 & 7.498\text{E}-01 & 9.528\text{E}-02 \end{bmatrix}$.

1. Compute the LU factorization of A using partial pivoting. Calculate with 4 decimal places, use rounding and write the numbers in scientific format.

Write the matrices P , L and U .

2. Use P , L and U to compute the determinant of A .