

MA 322 Quiz # 4	Spring 01–Sec. 3 Alberto Corso	Name: _____ _____	Please, be neat and show all your work; circle your answer.
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1. Compute the product AA^T if

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}.$$

Is it a coincidence that AA^T is a symmetric matrix?

pts: /2

2. Use the Gauss-Jordan method to find the matrix A^{-1} if

$$A = \begin{bmatrix} 1 & 0 & 0 \\ 2 & 1 & 3 \\ 0 & 0 & 1 \end{bmatrix}.$$

pts: /4

3. Find the LU factorization for the 3×3 matrix

$$A = \begin{bmatrix} 1 & 1 & 1 \\ 2 & 4 & 5 \\ 0 & 4 & 0 \end{bmatrix}.$$

total pts: /10

pts: /4