Math 228: Intro to Lin Alg & Diff Eqns   Name:_____

Quiz 2   *Jan. 31, 2002*   Section:_____

In the following problems let $A = \begin{bmatrix} -1 & 1 & 0 \\ 2 & -1 & 0 \\ -1 & 3 & 1 \end{bmatrix}$.

1. Find the inverse of A. Be sure to label the elementary row operations you perform.

2. a) Find the LU decomposition of A.

b) Use the LU decomposition of A to solve the system $AX = B$, where $B = \begin{bmatrix} -1 \\ 3 \\ 2 \end{bmatrix}$.