QUIZ4

1. Solve this system by Gaussian elimination with partial pivoting:

$$x_1 - 2x_2 + 4x_3 = 6$$
$$8x_1 - 3x_2 + 2x_3 = 2$$
$$-x_1 + 10x_2 + 2x_3 = 4$$

- Use only three significant digits of precision. How many row interchanges are needed? (Solution: [-0.111,0.0769,1.56])
- What is the LU equivalent of the coefficient matrix?
- Use this LU to solve but with right-hand side;

$$[1, -3, 5]^T$$