

Math 218D

Quiz 1

1. Let A is a 5×3 matrix:

- a) Write down the elementary matrix E which performs the row operation $R_1 - 3R_3$ on A .
- b) Write down the permutation matrix P which performs the row operation $R_2 \leftrightarrow R_4$ on A .

2. Determine if the following statements are **True** or **False**.

a) _____ : A $n \times n$ square matrix A in REF with $n - 1$ pivots is invertible.

b) _____ : Is the matrix

$$\begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix}$$

invertible?