

Math 218D

Quiz 3

1. Let A be the matrix

$$A = \begin{pmatrix} 1 & 2 & 0 & 4 \\ 0 & 1 & 0 & 2 \\ 0 & 0 & 3 & 8 \end{pmatrix}.$$

Find a basis for $\text{Col}(A)$.

2. Determine if the following statement is **True** or **False**. The vectors

$$\left\{ \begin{pmatrix} 1 \\ 0 \\ 3 \end{pmatrix}, \begin{pmatrix} 1 \\ 2 \\ 1 \end{pmatrix}, \begin{pmatrix} 4 \\ 5 \\ 7 \end{pmatrix} \right\}$$

form a basis of \mathbb{R}^3 .