

Quiz 3

Student ID Number:

Name _____

Math 3A, 6 PM

Please justify all your answers

October 18, 2018

Please also write your full name on the back

1. Are the vectors $\begin{bmatrix} 1 \\ -1 \\ 4 \end{bmatrix}$, $\begin{bmatrix} -2 \\ 1 \\ 3 \end{bmatrix}$, $\begin{bmatrix} 4 \\ -3 \\ 5 \end{bmatrix}$ linearly dependent?

2. True or False? Explain your reasoning.

(a) The columns of a 3×4 matrix are linearly dependent.

(b) The function $f(x) = 5x - 3$ is a linear transformation.