

MATH 335 Quiz 2

Name: _____

Show all work. 5 points each.

1. Give the reduced echelon form of $A = \begin{bmatrix} 0 & -3 & 9 \\ 2 & 1 & -7 \\ -1 & 4 & -5 \\ 1 & -4 & -2 \end{bmatrix}$ and determine if the columns of A form a linearly independent set. Why or why not?

2. Find the matrix of the linear transformation $T(x_1, x_2, x_3, x_4) = (x_1 + 2x_2, 0, 2x_2 + x_4, x_2 - x_4)$. Is T 1-1? Is T onto? Explain.