

MATH 335 Quiz 4

Name: _____

Show all work. 10 points .

1) Show that $T(x_1, x_2, x_3) = (x_1 - 5x_2 + 4x_3, x_2 - 6x_3)$ is a linear transformation by finding a matrix that implements the mapping. Next determine if the mapping is 1 – 1 or onto. Justify your answer.

2) Suppose $CA = I_n$. Show that $A\mathbf{x} = \mathbf{0}$ has only the trivial solution.