

MATH 335 Quiz 2

Name: _____

Show all work. 10 points each.

1. Find the standard matrix for the linear transformation T and determine if the transformation is 1-1, onto, both or neither. Justify your answer. $T(x_1, x_2, x_3, x_4) = (x_1 + 2x_2, 0, 2x_2 + x_4, x_2 - x_4)$.

2. Write the system

$$8x_1 + 6x_2 = 2$$

$$5x_1 + 4x_2 = -1$$

as a matrix equation and find the inverse of the coefficient matrix. Use the inverse matrix to solve the system.