

Quiz 5

Multiple Choice

1 Find the Standard matrix of the following linear transformation:

$$T \begin{bmatrix} x_1 \\ x_2 \end{bmatrix} = \begin{bmatrix} 2x_2 - 3x_1 \\ x_1 - 4x_2 \\ 0 \\ x_2 \end{bmatrix}$$

2 (25 pts) Let

$$A = \begin{bmatrix} -1 & 2 \\ 0 & 1 \end{bmatrix}, B = \begin{bmatrix} 3 & 0 & 1 \\ 1 & 2 & 0 \end{bmatrix}$$

Find the second column of $A^{-1}B$

- (a) $[-4 \ -2]'$
- (b) $[2 \ 4]'$
- (c) $[1 \ 2]'$
- (d) $[0 \ 2]'$
- (e) $[4 \ 2]'$