ITM426. Engineering Math

Short Quiz 2, 2025F, Weighting of 5%

Name: [   ]

#1. Let T be the linear transformation whose standard matrix is

$$A = \begin{pmatrix} 1 & -4 & 8 & 1 \\ 0 & 2 & -1 & 3 \\ 0 & 0 & 0 & 5 \end{pmatrix}$$

- Does T map $\mathbb{R}^4$ onto $\mathbb{R}^3$? **[2.5pt]**

- Is T a one-to-one mapping? **[2.5pt]**