

Math 3260 Practice - Matrix Algebra

Question 1. Let $A = \begin{bmatrix} 3 & 3 \\ 4 & -2 \end{bmatrix}$

(a) Find the product $A\vec{x}$ if $\vec{x} = \left\langle \frac{8}{9}, \frac{7}{9} \right\rangle$.

(b) Find $\text{rref}(\hat{A})$ if $\hat{A} = \left[\begin{array}{cc|c} 3 & 3 & 5 \\ 4 & -2 & 2 \end{array} \right]$.

(c) Evaluate the product AB if $B = \frac{1}{18} \begin{bmatrix} 2 & 3 \\ 4 & -3 \end{bmatrix}$.

(d) Evaluate $B\vec{y}$ if $\vec{y} = \langle 5, 2 \rangle$.