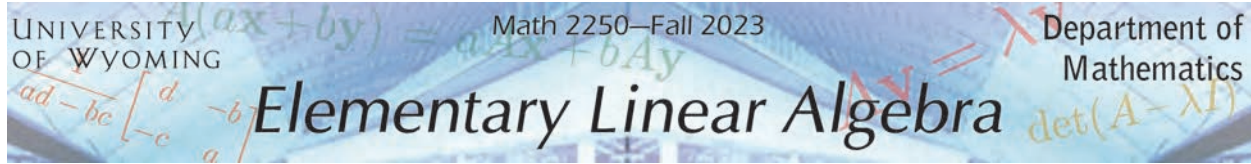


Name *Solution Key*



Quiz 2

Friday, September 15, 2023

For the matrices $A = \begin{bmatrix} 0 & 1 \\ 1 & 0 \\ 2 & 3 \end{bmatrix}$ and $B = \begin{bmatrix} 0 & 1 & 2 \\ 3 & 2 & 5 \end{bmatrix}$, compute

$$(a) \quad AB = \underbrace{\begin{bmatrix} 0 & 1 \\ 1 & 0 \\ 2 & 3 \end{bmatrix}}_{3 \times 2} \underbrace{\begin{bmatrix} 0 & 1 & 2 \\ 3 & 2 & 5 \end{bmatrix}}_{2 \times 3} = \underbrace{\begin{bmatrix} 3 & 2 & 5 \\ 0 & 1 & 2 \\ 9 & 8 & 19 \end{bmatrix}}_{3 \times 3}$$

$$(b) \quad BA = \underbrace{\begin{bmatrix} 0 & 1 & 2 \\ 3 & 2 & 5 \end{bmatrix}}_{2 \times 3} \underbrace{\begin{bmatrix} 0 & 1 \\ 1 & 0 \\ 2 & 3 \end{bmatrix}}_{3 \times 2} = \underbrace{\begin{bmatrix} 5 & 6 \\ 12 & 18 \end{bmatrix}}_{2 \times 2}$$