

If $A = \begin{pmatrix} 4 & 1 \\ 0 & -2 \\ 7 & 3 \end{pmatrix}$ and $B = \begin{pmatrix} 2 & -1 \\ 4 & 0 \end{pmatrix}$ find $AB = \underline{\hspace{2cm}}$.

(a) $\begin{pmatrix} 12 & -4 \\ -8 & -2 \\ 26 & -7 \end{pmatrix}$

(b) $\begin{pmatrix} 12 & -4 \\ 8 & -2 \\ 26 & -8 \end{pmatrix}$

(c) $\begin{pmatrix} 22 & -4 \\ -8 & 2 \\ 26 & -7 \end{pmatrix}$

(d) $\begin{pmatrix} 12 & -4 \\ -8 & -2 \\ 16 & -7 \end{pmatrix}$