

Samples Matrix Arithmetic

1. Evaluate: $\begin{pmatrix} -4 & 1 & 0 \\ -1 & 6 & -1 \end{pmatrix} \times \begin{pmatrix} -6 & -6 & 3 \\ 3 & -3 & -1 \\ 4 & -3 & 3 \end{pmatrix} - \begin{pmatrix} -2 & 3 & -6 \\ 5 & -6 & -4 \end{pmatrix}$

2. Evaluate: $\begin{pmatrix} 6 & 6 & -4 \end{pmatrix} - 2 \begin{pmatrix} -6 & -1 & 6 \end{pmatrix} - \begin{pmatrix} -6 & 1 & 2 \end{pmatrix}$

3. Evaluate: $\begin{pmatrix} 3 & 3 & -6 \end{pmatrix} \times \begin{pmatrix} -2 & -6 & 3 \\ -6 & 3 & 1 \\ -5 & 3 & 0 \end{pmatrix} \times \begin{pmatrix} 1 & 6 \\ -4 & -4 \\ 6 & 1 \end{pmatrix}$