

1.
$$\begin{pmatrix} -4 & -2 & 4 \\ 5 & 3 & -1 \\ -3 & -3 & -4 \end{pmatrix} - \begin{pmatrix} 4 & 2 & 2 \\ -5 & -4 & -1 \\ 1 & 4 & -2 \end{pmatrix} = \begin{pmatrix} -8 & -4 & 2 \\ 10 & 7 & 0 \\ -4 & -7 & -2 \end{pmatrix}$$

2. The answer is not defined because of different dimensions.

3.
$$\begin{pmatrix} -3 \\ 5 \\ -6 \end{pmatrix} - \begin{pmatrix} 0 \\ 6 \\ -3 \end{pmatrix} = \begin{pmatrix} -3 \\ -1 \\ -3 \end{pmatrix}$$