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

$= \begin{pmatrix} 5 \times (-6) - 5 \times 0 - 3 \times (-6) & 5 \times 4 - 5 \times (-4) - 3 \times (-1) \end{pmatrix}$

$= \begin{pmatrix} -12 & 43 \end{pmatrix}$

2. $\begin{pmatrix} 1 \\ 0 \end{pmatrix} \times \begin{pmatrix} 2 & -5 & -5 \end{pmatrix}$

$= \begin{pmatrix} 1 \times 2 & 1 \times (-5) & 1 \times (-5) \\ 0 \times 2 & 0 \times (-5) & 0 \times (-5) \end{pmatrix}$

$= \begin{pmatrix} 2 & -5 & -5 \\ 0 & 0 & 0 \end{pmatrix}$

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

$= \begin{pmatrix} 3 \times 0 - 3 \times (-1) & 3 \times 6 - 3 \times 0 \\ 1 \times 0 - 2 \times (-1) & 1 \times 6 - 2 \times 0 \\ 2 \times 0 + 2 \times (-1) & 2 \times 6 + 2 \times 0 \end{pmatrix}$

$= \begin{pmatrix} 3 & 18 \\ 2 & 6 \\ -2 & 12 \end{pmatrix}$