a)
Multiply out:

$$\begin{pmatrix} 2 & 4 \\ 3 & -1 \end{pmatrix}\begin{pmatrix} -2 & 6 \\ 2 & 1 \end{pmatrix}$$

How do we find the value in the top-left cell?	$\begin{pmatrix} 2 & 4 \\ 3 & -1 \end{pmatrix}\begin{pmatrix} -2 & 6 \\ 2 & 1 \end{pmatrix}$ $(2 \times -2) + (4 \times 2) = 4$	$\begin{pmatrix} 4 & \\ & \end{pmatrix}$
How do we find the value in the top-right cell?	$\begin{pmatrix} 2 & 4 \\ 3 & -1 \end{pmatrix}\begin{pmatrix} -2 & 6 \\ 2 & 1 \end{pmatrix}$ $(2 \times 6) + (4 \times 1) = 16$	$\begin{pmatrix} 4 & 16 \\ & \end{pmatrix}$
How do we find the value in the bottom-left cell?	$\begin{pmatrix} 2 & 4 \\ 3 & -1 \end{pmatrix}\begin{pmatrix} -2 & 6 \\ 2 & 1 \end{pmatrix}$ $(3 \times -2) + (-1 \times 2) = -8$	$\begin{pmatrix} 4 & 16 \\ -8 & \end{pmatrix}$
How do we find the value in the bottom-right cell?	$\begin{pmatrix} 2 & 4 \\ 3 & -1 \end{pmatrix}\begin{pmatrix} -2 & 6 \\ 2 & 1 \end{pmatrix}$ $(3 \times 6) + (-1 \times 1) = 4$	$\begin{pmatrix} 4 & 16 \\ -8 & 17 \end{pmatrix}$

b)
Multiply out:

$$\begin{pmatrix} 3 & -1 \\ 2 & 0 \end{pmatrix}\begin{pmatrix} 3 & -5 \\ 1 & 4 \end{pmatrix}$$

How do we find the value in the top-left cell?	$\begin{pmatrix} 3 & -1 \\ 2 & 0 \end{pmatrix}\begin{pmatrix} 3 & -5 \\ 1 & 4 \end{pmatrix}$ $(3 \times 3) + (-1 \times 1) = 8$	$\begin{pmatrix} 8 & \\ & \end{pmatrix}$
How do we find the value in the top-right cell?	$\begin{pmatrix} 3 & -1 \\ 2 & 0 \end{pmatrix}\begin{pmatrix} 3 & -5 \\ 1 & 4 \end{pmatrix}$ $(3 \times -5) + (-1 \times 4) = -19$	$\begin{pmatrix} 8 & -19 \\ & \end{pmatrix}$
How do we find the value in the bottom-left cell?	$\begin{pmatrix} 3 & -1 \\ 2 & 0 \end{pmatrix}\begin{pmatrix} 3 & -5 \\ 1 & 4 \end{pmatrix}$ $(2 \times 3) + (0 \times 1) = 6$	$\begin{pmatrix} 8 & -19 \\ 6 & \end{pmatrix}$
How do we find the value in the bottom-right cell?		

c)
Multiply out:

$$\begin{pmatrix} -1 & 3 \\ 0 & 2 \end{pmatrix}\begin{pmatrix} 5 & 3 \\ -2 & 1 \end{pmatrix}$$

How do we find the value in the top-left cell?	$\begin{pmatrix} -1 & 3 \\ 0 & 2 \end{pmatrix}\begin{pmatrix} 5 & 3 \\ -2 & 1 \end{pmatrix}$ (-1 × 5) + (3 × -2) = -11	$\begin{pmatrix} -11 & \\ & \end{pmatrix}$
How do we find the value in the top-right cell?	$\begin{pmatrix} -1 & 3 \\ 0 & 2 \end{pmatrix}\begin{pmatrix} 5 & 3 \\ -2 & 1 \end{pmatrix}$ (-1 × 3) + (3 × 1) = 0	$\begin{pmatrix} -11 & 0 \\ & \end{pmatrix}$
How do we find the value in the bottom-left cell?		
How do we find the value in the bottom-right cell?		

d)
Multiply out:

$$\begin{pmatrix} 2 & -3 \\ 1 & 0 \end{pmatrix}\begin{pmatrix} -1 & 4 \\ 2 & -1 \end{pmatrix}$$