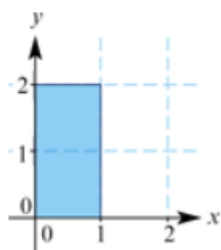


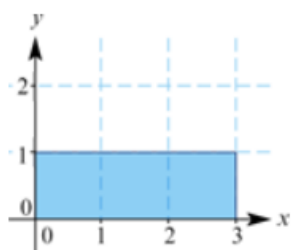
1 a i $\begin{bmatrix} 1 & 0 \\ 0 & 2 \end{bmatrix}$

ii



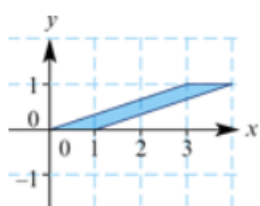
b i $\begin{bmatrix} 3 & 0 \\ 0 & 1 \end{bmatrix}$

ii



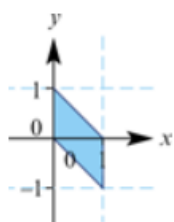
c i $\begin{bmatrix} 1 & 3 \\ 0 & 1 \end{bmatrix}$

ii



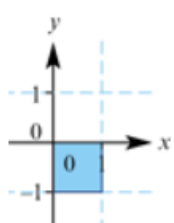
d i $\begin{bmatrix} 1 & 0 \\ -1 & 1 \end{bmatrix}$

ii



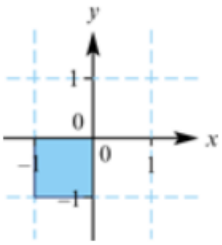
e i $\begin{bmatrix} 1 & 0 \\ 0 & -1 \end{bmatrix}$

ii



f i $\begin{bmatrix} 0 & -1 \\ -1 & 0 \end{bmatrix}$

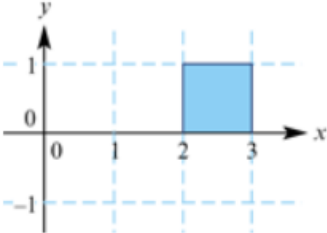
ii



2 a i

$$\begin{bmatrix} x' \\ y' \end{bmatrix} = \begin{bmatrix} x \\ y \end{bmatrix} + \begin{bmatrix} 2 \\ 0 \end{bmatrix} = \begin{bmatrix} x + 2 \\ y \end{bmatrix},$$

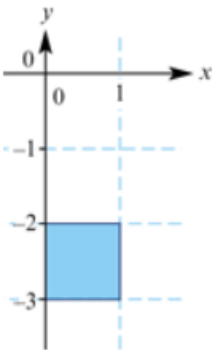
ii



b i

$$\begin{bmatrix} x' \\ y' \end{bmatrix} = \begin{bmatrix} x \\ y \end{bmatrix} + \begin{bmatrix} 0 \\ -3 \end{bmatrix} = \begin{bmatrix} x \\ y - 3 \end{bmatrix},$$

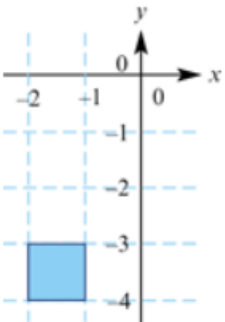
ii



c i

$$\begin{bmatrix} x' \\ y' \end{bmatrix} = \begin{bmatrix} x \\ y \end{bmatrix} + \begin{bmatrix} -2 \\ -4 \end{bmatrix} = \begin{bmatrix} x - 2 \\ y - 4 \end{bmatrix},$$

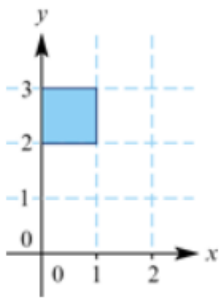
ii



d i

$$\begin{bmatrix} x' \\ y' \end{bmatrix} = \begin{bmatrix} x \\ y \end{bmatrix} + \begin{bmatrix} 0 \\ 2 \end{bmatrix} = \begin{bmatrix} x \\ y + 2 \end{bmatrix},$$

ii



e i

$$\begin{bmatrix} x' \\ y' \end{bmatrix} = \begin{bmatrix} x \\ y \end{bmatrix} + \begin{bmatrix} -1 \\ 2 \end{bmatrix} = \begin{bmatrix} x - 1 \\ y + 2 \end{bmatrix},$$

ii

