Question

$$2x + 3y = 12$$
$$x - 5y = -7$$

make it on a matrix forms as

$$\begin{pmatrix} 2 & 3 \\ 1 & -5 \end{pmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 12 \\ -7 \end{bmatrix}$$

$$\Delta_0 = \begin{bmatrix} 2 & 3 \\ 1 & -5 \end{bmatrix} =$$

$$\Delta_1 = \begin{bmatrix} 12 & 3 \\ -7 & -5 \end{bmatrix} =$$

$$\Delta_2 = \begin{bmatrix} 1 & 12 \\ 2 & -7 \end{bmatrix} =$$

Solve for X

$$X = \frac{\Delta_1}{\Delta_0}$$

$$Y = \frac{\Delta_2}{\Delta_0}$$

then substitute the value of X and Y to show that the system satisfy the function.