

$$m_1 = -\frac{1}{m_2}$$

$$m_1 m_2 = -\frac{1}{1} \rightarrow m_1 = 1$$

$$y = 2x + b \xrightarrow{\text{نقطه}} b = -1$$

$$y = 2x - 1$$

$$m = \tan \theta = \tan \frac{\pi}{4} \rightarrow \tan \theta = 1$$

$$y = 2x + b \xrightarrow{\text{نقطه}} b = 2 - 4 = -2$$

$$y = 2x - 2$$

$$m = \frac{\Delta y}{\Delta x} \rightarrow \frac{1}{1} = 1$$

$$y = 2x + b \xrightarrow{\text{نقطه}} b = 11$$

$$y = 2x + 11$$

$$m = m' \rightarrow m' = \frac{-2}{1} = -2$$

$$y = 2x + b \xrightarrow{\text{نقطه}} b = 12$$

$$y = 2x + 12$$

$$d = \sqrt{(5x)^2 + (5y)^2} \rightarrow d = \sqrt{9 + 16} = 5$$

$$d = \left| \frac{ax + by + c}{\sqrt{a^2 + b^2}} \right| \rightarrow d = \left| \frac{2x + 12 - 2}{\sqrt{20}} \right| \rightarrow \frac{10}{2} = 5$$

$$2x + 12 - 2$$

$$2x + 2y = 1, 2x + 2y = 12, 2x + 2y = 2$$

$$2x + 2y = 1 \xrightarrow{\div 2} x + y = 0.5$$

$$d = \left| \frac{c - C}{\sqrt{a^2 + b^2}} \right| \rightarrow \frac{12 - 2}{\sqrt{20}} = \frac{10}{\sqrt{20}} = \frac{10}{2\sqrt{5}} = \frac{5}{\sqrt{5}} = \sqrt{5}$$

$$\left| \frac{ax + by + c}{\sqrt{a^2 + b^2}} \right| = \left| \frac{a'x + b'y + c'}{\sqrt{a'^2 + b'^2}} \right| \rightarrow \left| \frac{2x - 2y - 1}{\sqrt{13}} \right| = \left| \frac{2x + 2y - 2}{\sqrt{13}} \right|$$

$$\tan \theta = \left| \frac{m_1 - m_2}{1 + m_1 m_2} \right|$$

$$y = 2x + 2 \rightarrow m = 2, y = 2x + 12 \rightarrow m = 2$$

$$\tan \theta = 1 \rightarrow \theta = 45^\circ$$

لایحه شد منظر است یا خاره؟ شد 45، 135

مع $d = \sqrt{(cos)^2 + (sin)^2} \rightarrow \sqrt{1^2 + 1^2} \rightarrow \boxed{1}$

(الف)

$$A \begin{vmatrix} 1 & 3 \\ -1 & 2 \end{vmatrix} \xrightarrow{+4} C \begin{vmatrix} 1 & -1 \\ 1 & 1 \end{vmatrix} \xrightarrow{+2} B \begin{vmatrix} 1 & -1 \\ 1 & 1 \end{vmatrix} \xrightarrow{+2} \begin{vmatrix} 1 & -1 \\ 1 & 1 \end{vmatrix}$$

$$\boxed{C \begin{vmatrix} 1 & -1 \\ 1 & 1 \end{vmatrix}}$$

(ب)

$$\frac{1}{1} \begin{vmatrix} -1 & 3 & 1 \\ -1 & 2 & 1 \\ 1 & 1 & 1 \end{vmatrix} = \frac{1}{1} (-1 \cdot 2 \cdot 1 + (-1) \cdot 1 \cdot 1 - 1 \cdot 1 \cdot 1 - 1 \cdot 1 \cdot 1) = \frac{1}{1} (-2 - 1 - 1 - 1) = \frac{1}{1} (-5) = -5$$

$$x' = \frac{2-2-1}{3} = -1$$

$$y' = \frac{1 \cdot 2 - 1 \cdot 1}{3} = -1$$

(الف) (ص)

$$x = \frac{2y+1}{2y-2} \rightarrow 2y+1 = x(2y-2)$$

$$\boxed{y = \frac{2x+1}{2x-2}}$$

(ج)

$$y = \frac{2x-1}{2x-2} \rightarrow y(2x-2) = 2x-1$$

$$-2x = -2y+1$$

$$\boxed{y = \frac{1-2x}{2x-2}}$$

(د)

$$x' = x+2 \xrightarrow{y' = y-2} y-1 = \frac{2x+1}{x-1} \Rightarrow y = \frac{2x+1}{x-1} + 1 = \boxed{y = \frac{2x+2}{x-1}}$$

(هـ)

$$x' = x+2 \xrightarrow{y' = y+2} y = \frac{2x+2+1}{x} = 2 \Rightarrow \boxed{y = \frac{2}{x}}$$

(ب)

$$\begin{cases} 2x+4y=2 \\ x-2y=1 \end{cases} \xrightarrow{\times 2} \begin{cases} 2x+4y=2 \\ 2x-4y=2 \end{cases} \rightarrow 8y=0 \Rightarrow y=0$$

(الف) (1)

$$x = \frac{-2-1}{-19} = \frac{-3}{-19} = \frac{3}{19}$$

$$y = \frac{2-2}{-19} = \frac{0}{-19} = 0$$