

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

2.)

$$y = -\frac{1}{2}x + 12$$

جواب
 $2y + 4z = -1$

معادله (۲) را به معادله (۱) در نظر می‌گیریم:

$$y - y_1 = m(x - x_1) \Rightarrow y - 2 = 2(x - 1) \Rightarrow y = 2x - 1.$$

$$\Rightarrow \frac{\frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}}} = \frac{1}{2} : \frac{1}{2} = 1 = \tan 45^\circ = \sqrt{1}$$

$$y - y_1 = m(x - x_1)$$

$$y - \mu = \sqrt{c}(x - \xi) \rightarrow y = \sqrt{c}x - \xi\sqrt{c} + \mu$$

ج) $\bar{c}_{n+2y} = c$: $\frac{|c_{n+2y} - c|}{\sqrt{\sigma_y^2 + \varepsilon^2}} = \frac{|4 + 12 - c|}{\sigma} = \frac{1\sigma}{\sigma} = 1$

الف) $\frac{-2}{5}$ $\frac{-4}{4} = \frac{-2}{5} \rightarrow$ $\frac{2x+4y-4=0}{2x+4y-12=0} \xrightarrow{\times 2} \begin{cases} 2x+4y-4=0 \\ 4x+8y-24=0 \end{cases} \rightarrow \frac{C_1+C_2}{2} = \frac{-12-4}{2} = -8$

ج) $\frac{C_1 - C_2}{\sqrt{C_1^2 + C_2^2}} = \frac{-12 + 11}{\sqrt{12^2 + 11^2}} = \frac{-1}{\sqrt{145}} = -\frac{1}{\sqrt{145}}$

$$r_n + r_y = c - r_n + r_y - c = ,$$

$$r_n - r_y = 1 \rightarrow r_n - r_y - 1 = 0$$

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$$r_n + r_y - r = r_n - r_y - 1 \rightarrow -n + dy - r = 0$$

$$\frac{|r_n + r_y - r_i|}{\sqrt{r_i}} = \frac{|r_n - r_y - 1|}{\sqrt{r_i}}$$

$$r_n + r_y - r = -r_n + r_y + 1 \rightarrow \boxed{2n + y - z = 1}$$

$$\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4}$$

$$y - r_n = \omega$$

$$\Rightarrow \text{Slope} : \tan \alpha = \left| \frac{m - m'}{1 + mm'} \right| = \frac{v + c}{1 - v} = \left| \frac{d}{-d} \right| = +1 \quad \alpha = 45^\circ$$

$$y + rx = c$$

4. $\frac{1}{x} = -x$

الف) $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2} = \sqrt{(2+1)^2 + (-2-3)^2} = \sqrt{49 + 25} = 10$

ج) $\vec{r} = \begin{bmatrix} \frac{x_1 + x_2}{2} \\ \frac{y_1 + y_2}{2} \end{bmatrix} = \begin{bmatrix} \frac{0+2}{2} \\ \frac{-2+2}{2} \end{bmatrix} = \begin{bmatrix} 1 \\ 0 \end{bmatrix}$

$$\begin{bmatrix} 9 \\ 1 \end{bmatrix} \begin{bmatrix} -2 \\ 2 \end{bmatrix} \begin{bmatrix} -1 \\ -10 \end{bmatrix}$$

$$\text{موزن مل (اثر)} = \left[\frac{\frac{n_1 + n_2 + n_3}{c}}{\frac{y_1 + y_2 + y_3}{c}} \right] = \left[\frac{\frac{c - r - 1}{c}}{\frac{1 + c - 1}{c}} \right] = \left[\frac{-c}{-c} \right]$$

ج) $\sum_{i=1}^3 : \begin{vmatrix} 2 & -2 & -1 \\ 1 & 2 & -1 \\ 1 & 1 & 1 \end{vmatrix} \times \frac{1}{7} = |9 - 10 + 22 + 20 + 29 + 2| \times \frac{1}{7} = 81$

$$y = \frac{r_{n+1}}{r_n - r}$$

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

$$y = \frac{r_{n+1}}{r_n - r}$$

$$\text{الف) } \frac{y}{x} : \frac{y}{x} \rightarrow -y = \frac{x+1}{x-1} \xrightarrow{x(-1)} \boxed{y = \frac{-x-1}{x-1}}$$

ج) $\frac{y_{n+1}}{y_n} : \frac{r_{n+1}}{r_n} \rightarrow \boxed{y = \frac{-r_{n+1}}{-2n-2}}$

c) $\begin{matrix} \vec{r} & \vec{r} \\ \text{P} & \text{Q} \end{matrix}$: $\frac{\vec{r}_Q - \vec{r}_P}{r_{PQ}}$ $\rightarrow x = \frac{r_y - 1}{-r_y - 2} \rightarrow x = \frac{r_y - 1}{r_y + 2}$

$$y = -\frac{r_{n+1}}{s_{n-1}} \rightarrow y = -\frac{r_n - 1}{s_{n-1}}$$

$$y = \frac{r_{n+1}}{n-2}$$

صبا: $[-\frac{1}{2}]$

$$\text{الف) } \begin{aligned} n' &= n+2 \rightarrow n = n'+2 \\ y' &= y+c \rightarrow y = y'-c \end{aligned} \Rightarrow y'-c = \frac{r(n'+2)+1}{n'+2-c} \rightarrow$$

$$y' - c = \frac{r_n' + c}{n' - 1} \rightarrow y' = \frac{r_n' + c}{n' - 1} + c = \frac{r_n' + c + r_n' + c}{n' - 1} = y$$

$$\rightarrow y = \frac{\omega x' + \gamma}{x' - 1}$$

صبا: [٢٢]

$$\Rightarrow \begin{aligned} n' &= n - r \rightarrow n = n' + r \\ y &= y - r \rightarrow y = y' + r \end{aligned} \Rightarrow y' + r = \frac{r(n' + r) + 1}{n' + r - r} \rightarrow y' = \frac{r n' + r}{n'} - r = \frac{r n' + r - r n'}{n'} = \boxed{\frac{r}{n'} = y}$$

$$\begin{cases} x + 2y = 7 \\ x - 2y = 1 \end{cases}$$

الف) روش حذفی :

$$\begin{cases} 2x + 8y = 2 \\ x - 2y = 1 \end{cases} \xrightarrow{x(-2)} \begin{cases} 2x + 8y = 2 \\ -x + 4y = -2 \end{cases}$$

$$\frac{2x + 8y = 2}{-x + 4y = -2} \rightarrow 19y = -1 \rightarrow y = -\frac{1}{19}$$

$$x = 2y + 1 = -\frac{2}{19} + 1 = \frac{17}{19} = x = \begin{bmatrix} \frac{17}{19} \\ -\frac{1}{19} \end{bmatrix}$$

ب) $\rightarrow \begin{cases} x + 2y = 2 \\ x - 2y = 1 \end{cases} \Rightarrow \text{فخرج: } -12 - 2 = -14 \rightarrow \begin{matrix} x = -\frac{12+14}{-19} = \frac{-12}{-19} = \frac{12}{19} \\ y = \frac{1-2}{-19} = \frac{-1}{19} \end{matrix} \Rightarrow \begin{bmatrix} \frac{12}{19} \\ -\frac{1}{19} \end{bmatrix}$