

بیا میں نوروز - تالیف ۱۵ - یازدہم پسر B

$$\text{الف) } m = \frac{r - (-r)}{r - \Delta} = -1 \rightarrow y + r = -1(m - \Delta) \rightarrow y = -1x + 1 \quad (1)$$

ج) $\rightarrow$ $\frac{dy}{dx} = \frac{-6}{2} = -3 \rightarrow y-2 = -3(x-4) \rightarrow y = -3x + 14$

$$2.) \frac{1}{w} = m_1 \rightarrow m_r = r \rightarrow y-r = r(x-r) \rightarrow y = r^2 x - 1.$$

5) $\tan \alpha = m \rightarrow \tan \frac{\pi}{r'} = \sqrt{r}$

$$\hookrightarrow y - \bar{y} = \sqrt{r}(x - \bar{x})$$

$$L \rightarrow y = 1, \sqrt{x} - \frac{4}{\sqrt{x}} + 2 - \frac{4}{\sqrt{x}}$$

الف) $\sqrt{(v-r)^2 + (r)^2} = \sqrt{25} = 5$ / ب) $\frac{|6+11-r|}{\sqrt{r^2 + r^2}} = \frac{15}{5} = 3$ $r_x + r_y - r = 0$ (2)

الف) $\begin{cases} 5x + 4y = 1 \\ 3x + 4y = 13 \end{cases} \xrightarrow{\text{طرح}} 5x + 4y = \frac{1+13}{4} \rightarrow 5x + 4y = 1.0$ / ب) $d = \frac{|13-1|}{\sqrt{\frac{5^2}{16} + \frac{4^2}{16}}} = \frac{12}{\sqrt{\frac{25}{16} + \frac{16}{16}}} = \frac{12}{\sqrt{\frac{41}{16}}} = \frac{12}{\frac{\sqrt{41}}{4}} = \frac{48}{\sqrt{41}}$ (2)

$$\frac{|r_x - r_y - 1|}{\sqrt{r_x^2 + r_y^2}} = \frac{|r_x + r_y - r|}{\sqrt{(-r)^2 + r^2}} \rightarrow \begin{aligned} r_x - r_y - 1 &= r_x + r_y - r \rightarrow x - \Delta y = -r \\ r_x - r_y - 1 &= -r_x - r_y + r \rightarrow \Delta x + y = r \end{aligned} \quad (*)$$

$$m_i = -v / m_r = \gamma \rightarrow \tan \alpha = \left| \frac{m_i - m_r}{1 + m_i m_r} \right| = \left| \frac{-v - \gamma}{1 - \gamma} \right| = \frac{\Delta}{\omega} = 1 \rightarrow \begin{cases} \alpha_i = 45^\circ \rightarrow \text{✓} \\ \alpha_r = 135^\circ \rightarrow \text{غلط} \end{cases} \quad \text{زاویه بین خط و محور}$$

الف) $d = \sqrt{c^2 + 1^2} = \sqrt{1^2} = 1$ / ب) $C \begin{vmatrix} \frac{-2+r}{r} \\ \frac{r+(-r)}{r} \end{vmatrix} \rightarrow C \begin{vmatrix} -1 \\ 1 \end{vmatrix}$ (4)

$$\text{الف) } x = \frac{-1 - 2 + 3}{3} = -3/3 = -1 \Rightarrow M \begin{vmatrix} -2 & -3 \\ -3 & 1 \end{vmatrix} / \text{ب) } S = \frac{1}{4} \begin{vmatrix} -1 & -3 & 1 \\ -2 & 3 & 1 \\ 3 & 1 & 1 \end{vmatrix} = \frac{1}{4} \begin{vmatrix} -2 & -2 & -9 & -9 & +1 & -2 & 6 \\ -1 & +1 & -2 & 6 \end{vmatrix} \textcircled{V}$$

الف) $-y = \frac{rx+1}{rx-r} \rightarrow y = \frac{-rx-1}{rx-r} \quad \text{ب) } y = \frac{-rx+1}{-rx-r} \quad \text{ج) } x = \frac{ry+1}{ry-r} \rightarrow y = -\frac{-rx-1}{rx-r} = \frac{rx+1}{rx-r}$ (A)

$$2) +x = \frac{-y+1}{x+y+3} \rightarrow x = \frac{-y+1}{x+y+3} \rightarrow y = -\frac{3x-1}{x+1} = \frac{-3x+1}{x+1}$$

الف) $x' = x - 2 \rightarrow x = x' + 2$
 $y' = y + 3 \rightarrow y = y' - 3$

$$y' - 3 = \frac{2(x' + 2) + 1}{(x' + 2) - 1} = \frac{2x' + 5}{x' - 1} \rightarrow y' = \frac{2x' + 5 + 3x' - 3}{x' - 1} = \frac{5x' + 2}{x' - 1}$$

(9)

$$\Rightarrow 19y = -1 \rightarrow y = \frac{-1}{19}$$

ج) $x = - \frac{\begin{vmatrix} 1 & 2 \\ -5 & 1 \end{vmatrix}}{\begin{vmatrix} 2 & 1 \\ 1 & -5 \end{vmatrix}} = \frac{-(1+10)}{-10-1} = \frac{11}{19}$ (10)

$$y = \frac{\begin{vmatrix} 2 & 2 \\ 1 & 1 \end{vmatrix}}{\begin{vmatrix} 2 & 2 \\ 1 & -2 \end{vmatrix}} = \frac{2-2}{-2-2} = \frac{-1}{19}$$

$$\begin{aligned} x' &= x - r, y' = y - r & (1) \quad (9) \\ x &= x' + r, y = y' + r \\ \rightarrow y' + r &= \frac{r(x' + r) + 1}{x' + r - r} \\ \rightarrow y' &= \frac{rx' + r + 1}{x'} - \frac{rx'}{x'} \\ \rightarrow y' &= \frac{r}{x'} \end{aligned}$$