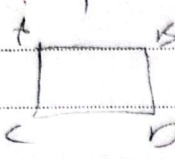


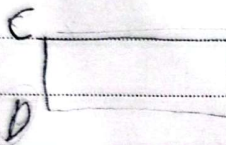
$m = -\frac{1}{r} \quad A(-2, k) \quad B(4, m)$



$$m = \frac{y_B - y_A}{x_B - x_A} = \frac{m - k}{4 - (-2)} = -\frac{1}{r} \Rightarrow m - k = -\frac{r}{3}$$

$AB = \sqrt{(4+2)^2 + (m-k)^2} = \sqrt{r^2} \Rightarrow AB = r$

$A(-1, 4) \quad B(3, 1) \quad C(x, y) \quad D(-1-x, y-3)$



$n_A + n_C = n_B + n_D$

$A: -1 + n = 3 - n \Rightarrow n = +\frac{r}{2}$

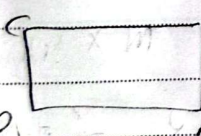
$m_{AB} = -\frac{1}{m_{AD}} \Rightarrow m_{AB} \times m_{AD} = -1 \Rightarrow -\frac{r}{2} \times \frac{y-4}{-1-x+1} = -1 \Rightarrow y = -1$

$AB = \sqrt{(-1-3)^2 + (4-1)^2} = r$

$AD = \sqrt{(-1+\frac{r}{2})^2 + (4-(-1))^2} = \frac{r}{2}$

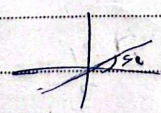
$P = (\omega + \frac{\omega}{r}) \times r = 1\omega$

$n_A + n_D = n_B + n_C \Rightarrow -1 - n = 3 + n \Rightarrow -2n = 4 \Rightarrow n = -\frac{\omega}{2}$



$x_A + x_D = x_B + x_C$
 $-1 - x = 3 + x \Rightarrow x = -2$

$\tan \theta = (m^2 - 1) \alpha = r$



$\alpha = \tan^{-1} r = \sqrt{r}$

$\alpha = \frac{r}{m^2 - 1} \Rightarrow \frac{r}{m^2 - 1} = \sqrt{r} \Rightarrow \sqrt{r} m^2 - \sqrt{r} = -r$

$\sqrt{r} m^2 + r m - \sqrt{r} = 0$

$\Delta = (r)^2 - 4(\sqrt{r})(-\sqrt{r}) = 14$

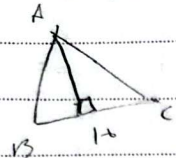
$\left| \frac{\sqrt{r}}{r} - \left(\frac{-r}{\sqrt{r}} \right) \right| = \frac{r\sqrt{r}}{r}$

$\frac{-r \pm r}{2\sqrt{r}} = \frac{\sqrt{r}}{2}$

Arman

$\frac{x+1}{x-1} = \frac{e}{r} \quad r = -24$

$A(1,9) \quad B(3,3) \quad C(5,11)$



$$m_{BC} = \frac{11-3}{5-3} = \frac{8}{2} = 4 \quad \text{Then } 2-3 = 2(2-4) \\ 2-3 = 2(2-4) \\ 2-3 = 4-8 \\ 2-2n+3=0$$

$$AH = \frac{|1 \times 9 + (-2 \times 1) + 3|}{\sqrt{1+4}} = \frac{10}{\sqrt{5}} = \frac{10\sqrt{5}}{5} = 2\sqrt{5}$$

$AB = 2 + 2n = 4 \Rightarrow 2 + 2n = 4$

$AC = 2 - 2n = 10 \Rightarrow 2 - 2n = 10$

$BC = 2 - 2n = 19 \Rightarrow -2n = 17 \Rightarrow n = -8.5$

$AB = 2 + 2n = 4 \Rightarrow 2 + 2n = 4$

$BC = 2 - 2n = 19 \Rightarrow -2n = 17 \Rightarrow n = -8.5$

$11n = 20$

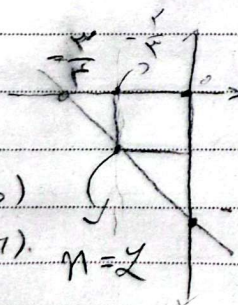
$n = \frac{20}{11} \Rightarrow 2 = 1$

$m_{AC} = \frac{11-9}{5-1} = \frac{2}{4} = \frac{1}{2} \quad 2-1 = \frac{1}{2}(n-4)$

$2 - \frac{1}{2}n - \frac{1}{2} = 0 \Rightarrow 2 - \frac{1}{2}n - \frac{1}{2} = 0$

$|1 \times 11 - 3 \times 3 - 1 \times 1| = \frac{1}{2} = \frac{5}{2}$

$\sqrt{14} = 2$



$m = \frac{-4-0}{0-(-1)} = -4$

$2 + 4 = -1(n-0) \Rightarrow 2 = -1n - 4$

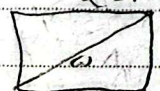
$n = -1n - 4 \Rightarrow 2n = -4 \Rightarrow n = -2 \Rightarrow 2 = -2$

$2 - 4n = 1 \Rightarrow 2 - 4n = 1$

$2 = 4n + 1 \Rightarrow 2 = 4n + 1$

$2 = 4n + 1 \Rightarrow 2 = 4n + 1$

$AB = \frac{1}{\sqrt{2}} \Rightarrow \frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}}$



$S = \frac{\sqrt{14} \times \sqrt{14}}{(1-4)(1+1)} = \frac{14}{-2} = -7$



$$k=0, n=1$$

$$\frac{AH \cdot |f - x_0 - 1|}{\sqrt{941}} = \frac{\mu}{\sqrt{10}}$$

$AB = \mu$

$$BH^{\perp} + AH^{\perp} = AB^{\perp} \Rightarrow BH^{\perp} = \frac{9}{10} - \frac{9}{10} = \frac{11}{10}$$

$$S = \frac{q}{\sqrt{t_0}} \times \frac{r}{\sqrt{t_1}} = \frac{r_1}{r_0}$$

$$B_H = \frac{4}{\sqrt{10}}$$

$$M = \sqrt{\mu}$$



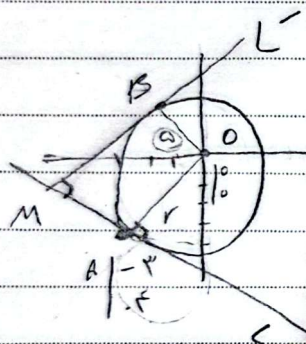
$$\sqrt{r} = \frac{a-b}{-\frac{1}{r} + \frac{1}{r}} \Rightarrow a-b = -\frac{\sqrt{r}}{9}$$

سوال ۹:

$$AB_2 = \sqrt{\left(-\frac{1}{r} + \frac{1}{r}\right)^2 + (a-b)^2} = \sqrt{\frac{1}{r^2} + \frac{r}{r^2}} = \frac{r}{r} = 1$$

$$\sqrt{2} = a\sqrt{2}$$

$$a = \frac{1}{\sqrt{2}} \Rightarrow \sqrt{2} = \frac{\sqrt{2}}{\sqrt{2}}$$



$$r = \sqrt{(-1-0)^2 + (-1-0)^2} = \omega$$

$$OA \parallel BM \quad m_{OA} = \frac{-c_0}{-r_0} = \frac{r}{r_0}$$

$$m = \frac{F}{F_N}$$

$$L \Rightarrow \mathcal{L} + \mathcal{E} = -\frac{\pi}{2} (n + \frac{1}{2})$$

$$m_{M_2} = - \frac{1}{2}$$

$$n_A + \nu = n_M + 0$$

$$Z = -\frac{r}{r} n - \frac{r\omega}{r}$$

$$OB = \omega \rightarrow \sqrt{(n-0)^2 + (y-0)^2} = \omega \quad B = \left| \frac{-r}{r} \right| \rightarrow \frac{y}{r} = \frac{r}{r} (n + \frac{y^2}{r^2})$$

$$(r_{ij} = -r_{ji} - r_{\omega}) \times r$$

$$Q = \frac{C}{R} N + \frac{P_0}{R}$$

$$Y = (M + Y_w) \times r$$

$$\left. \begin{aligned} 12x + 9y &= -40 \\ -12x + 17y &= -100 \end{aligned} \right\} \Rightarrow 26y = -140 \Rightarrow y = -\frac{70}{13}$$

$$n \times 2 = v$$