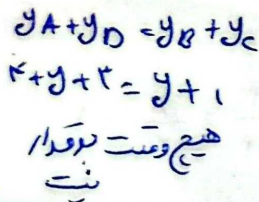


9

$$S_{\text{مع}} = (\mu_0 \eta_0)^{-1} = (\epsilon_0)^{-1} = \boxed{\epsilon_0}$$



$$\left(\frac{r}{r}\right)^r \sqrt{\frac{1}{r} + r} = \sqrt{\frac{r}{r}} = \frac{r}{r}$$

$$-\frac{1}{K} \Rightarrow m_{BC} = \frac{1}{K}$$

$$m_{BC} = \frac{\Delta y}{\Delta x} = \frac{F}{F} = \frac{y-1}{\frac{F}{F} - \frac{Fy}{F}} = \frac{y-1}{\frac{-F}{F}}$$

$$-4 = \frac{y-1}{-1} \Rightarrow y = -4$$

$$b_{\text{res}} = Y \left(\frac{\sigma}{Y} + \delta \right) = \boxed{15}$$

$$rmx + (m^2 - 1)y = r$$

$\frac{y}{x} = m = \tan \theta = \tan 45^\circ = \sqrt{r}$
 $\therefore m = \sqrt{r}$

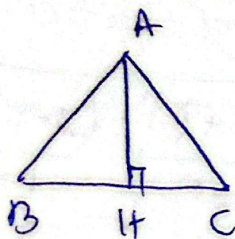
$$\frac{y - y_0}{x - x_0} = \frac{-r}{m^2 - 1} = \sqrt{r} \Rightarrow \sqrt{r} m^2 - \sqrt{r} = -r \Rightarrow \sqrt{r} m^2 + r - \sqrt{r} = 0$$

$$\Delta = b^2 - 4ac = (r)^2 - 4 \times \sqrt{r} \times -\sqrt{r} = r + 4r = 5r \Rightarrow \sqrt{\Delta} = \sqrt{5r} = \sqrt{r}$$

$$m = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-r \pm \sqrt{r}}{2\sqrt{r}} \Rightarrow \frac{-r + \sqrt{r}}{2\sqrt{r}} = \frac{-r}{2\sqrt{r}} = -\frac{\sqrt{r}}{2}$$

$$\frac{-r - \sqrt{r}}{2\sqrt{r}} = -\frac{r + \sqrt{r}}{2\sqrt{r}} = -\frac{\sqrt{r}}{2} \times \frac{\sqrt{r}}{\sqrt{r}} = -\frac{\sqrt{r}}{2}$$

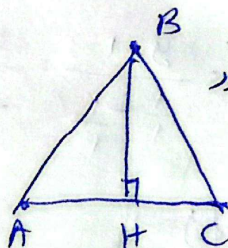
$$\text{المعادلة } \Rightarrow \frac{\sqrt{r}}{2} - (-\frac{\sqrt{r}}{2}) = \frac{\sqrt{r}}{2} + \frac{\sqrt{r}}{2} = \frac{\sqrt{r}}{1}$$



$$m_{BC} = \frac{\Delta y}{\Delta x} = \frac{11 - r}{r - r} = \frac{11 - r}{0} = \frac{11 - r}{0} = r$$

$$y = rx + b \xrightarrow{(r, r)} r = r \times r + b \Rightarrow b = -r$$

$$BC \text{ إلى } A \text{ المسافة} = \frac{|y - rx + r|}{\sqrt{a^2 + b^2}} = \frac{9 - r \times 1 + r}{\sqrt{a^2 + b^2}} = \frac{9 - r + r}{\sqrt{a^2 + b^2}} = \frac{9}{\sqrt{a^2 + b^2}} = \frac{9}{\sqrt{1 + (-r)^2}} = \frac{9}{\sqrt{1 + r^2}} = \sqrt{a}$$



المعادلة
 المسافة من B
 إلى AC
 AB, BC

$$AB: y + rx = v \Rightarrow ry - rx = -12$$

$$BC: ry - vx = -14$$

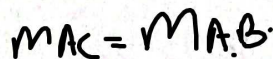
$$\Rightarrow -11x = -r^2 \Rightarrow x = r \Rightarrow y + rx = v$$

$$\Rightarrow y = 1$$

$$AC: ry - vx = 14$$

$$\frac{|ry - vx - 14|}{\sqrt{a^2 + b^2}} = \frac{|r \times 1 - r^2 \times r - 14|}{\sqrt{a^2 + b^2}} = \frac{r - r^3 - 14}{\sqrt{a^2 + b^2}} = \frac{r}{a} = \frac{r}{b} = \frac{r}{r}$$

⑥ قطر مدبرع هاند خورده



$$\begin{aligned} -1a &= a^{-1} \\ -9a &= -9 \Rightarrow a = \frac{1}{9} \end{aligned}$$

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$$a = -1 \quad y + x - 1 = 0$$

Diagram of a rectangle with vertices labeled a, b, c, d and a diagonal line drawn from a to c . The text $a = 1$ is written next to the diagram.

$$\text{فاصلی (وسط مداری)} = \frac{|C - C'|}{\sqrt{a^2 + b^2}} = \frac{|0 - (-1)|}{\sqrt{1^2 + 1^2}}$$

$$= \frac{1}{\sqrt{r}}$$

$$a = -1 \Rightarrow \frac{|c-c'|}{\sqrt{a^2+b^2}} = \frac{1}{\sqrt{1+1}}$$

$$\frac{v}{r} - \frac{1}{r} = C \Rightarrow \frac{v}{r} = C \Rightarrow C = \frac{v}{r}$$



①

$$A(E_{10})$$

$$BC = \frac{1}{\sqrt{1+r^2}}$$

$$m_{AB} \times m_{BC} = -1 \Rightarrow m_{AB} = -r$$

$$y = -rx + b \xrightarrow{(1,0)} 0 = -r \cdot 1 + b \Rightarrow b = r$$

$$y = -rx + r$$

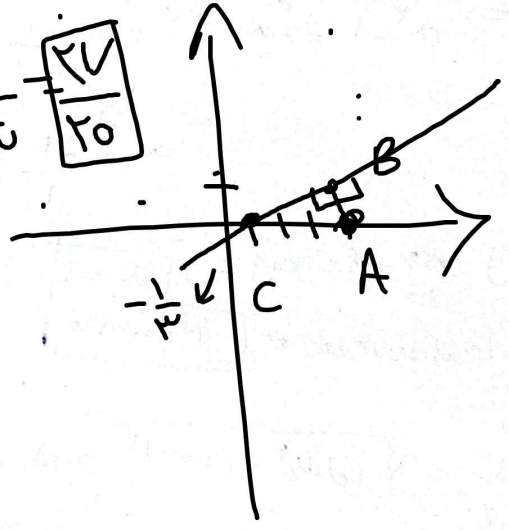
$$\begin{cases} x - ry = 1 \\ rx + y = 1r \end{cases} \Rightarrow \begin{cases} x - ry = 1 \\ rx - ry = r \end{cases} \Rightarrow \begin{cases} x - ry = 1 \\ 0 = -r \cdot r + b \end{cases} \Rightarrow b = r$$

$$\Rightarrow 1 \cdot y = 9 \Rightarrow y = 0,9 \quad x - ry = 1 \Rightarrow x - r \cdot 0,9 = 1 \Rightarrow x = r \cdot 0,9 + 1$$

$$x - ry - 1 = 0 \xrightarrow{y=0} x = 1$$

$$S = \frac{1}{r} AC \times BH = \frac{1}{r} \times r \times \frac{9}{10} = \frac{9}{10}$$

$$AC = \sqrt{(x_A - x_C)^2 + (y_A - y_C)^2} = r$$



$$BH = y_B = 0,9$$

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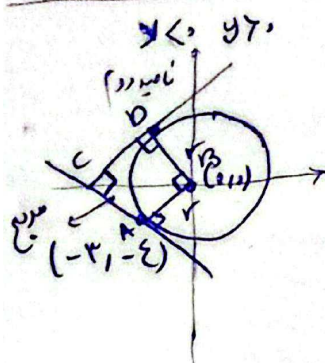
$$(-\frac{1}{r}, b) \quad (-\frac{1}{r}, a)$$

$$m = \frac{\Delta y}{\Delta x} = \sqrt{r} = \frac{b-a}{-\frac{1}{r} - (-\frac{1}{r})} = \frac{b-a}{-\frac{1}{r} + \frac{1}{r}} = \frac{b-a}{\frac{1}{r}} = \sqrt{r} \Rightarrow 4(b-a) = \sqrt{r}$$

$$\Rightarrow b-a = \frac{\sqrt{r}}{4}$$

$$r = \sqrt{(x_2-x_1)^2 + (y_2-y_1)^2} = \sqrt{2(x_2-x_1)^2} = \sqrt{2} \sqrt{r} = \frac{1}{r} \times \sqrt{r} = \frac{\sqrt{r}}{r}$$

$$\begin{aligned} \text{نقطه} \quad \text{فاصله} &= \sqrt{(x_1-x_2)^2 + (y_1-y_2)^2} = \sqrt{(-\frac{1}{r} - (-\frac{1}{r}))^2 + (b-a)^2} \\ &= \sqrt{\frac{r}{r^2}} = \frac{r}{r} = \frac{1}{r} \end{aligned}$$



$$r = \text{فاصله} = \sqrt{(x_1-0)^2 + (y_1-0)^2} = \sqrt{\frac{(-r-0)^2 + (-r-0)^2}{r^2}} = r$$

$$AB \parallel CD \Rightarrow m_{AB} = m_{CD} \Rightarrow \frac{\Delta y}{\Delta x} = \frac{0 - (-r)}{0 - (-r)} = \frac{r}{r}$$

$$y = \frac{r}{r}x + b \rightarrow y = \frac{r}{r}x$$

$$0 = 0 + b \Rightarrow b = 0$$

$$\text{خط } CD \Rightarrow \frac{r}{r}x + b \Rightarrow ry = rx + rb \Rightarrow ry - rx - rb = 0$$

فاصله از مرکز تا خط

$$\frac{|ry - rx - rb|}{\sqrt{r^2 + (-r)^2}} = \frac{|rx - ry - rb|}{r} = r = |rb| = 2r$$

$$rb = 2r \Rightarrow b = \frac{2r}{r}$$

$$rb = -2r \Rightarrow b = -\frac{2r}{r}$$

$$m_{AB} \times m_{AC} = -1$$

$$\frac{r}{r} \times m_{AC} = -1 \Rightarrow m_{AC} = -\frac{r}{r}$$

$$\text{خط } AC \quad y = -\frac{r}{r}x + b \Rightarrow \frac{-r}{r}x - r + b = -r \Rightarrow b = -\frac{r}{r} - \frac{r}{r} = -\frac{2r}{r}$$

$$\Rightarrow y = -\frac{r}{r}x - \frac{2r}{r}$$

فاصله از مرکز تا خط AC, CD

$$\Rightarrow y = -\frac{r}{r}x - \frac{2r}{r} \Rightarrow \begin{cases} ry = -rx - 2r \\ ry - rx - 2r = 0 \end{cases}$$

$$ry + rx - 2r = 0$$

$$-1(x - r) = r \Rightarrow ry = -r \Rightarrow y = -1$$

$$2r \times r + 2r = 0$$

$$2r \times r = -2r$$

$$r = -\frac{2r}{2r} = -1$$