

تلف (۱۷)

(بازدهم - C)

۲۰

مکان مختاری

A (-۲, k) B (۴, m) $\frac{2}{-} = -\frac{1}{r}$

①

$m = \frac{\Delta y}{\Delta x} \rightarrow \frac{k-m}{-2-4} = -\frac{1}{r} \rightarrow k-m = \frac{4}{r} = ۳$

۲

$\sqrt{(k-m)^2 + (-2-4)^2} = \sqrt{9+۳۶} \rightarrow \sqrt{۴۵}$ طول منحنی

$\sqrt{۴۵} \times \sqrt{۴۵} \Rightarrow ۴۵ \Leftarrow S$

A (-۱, ۴)

AB || CD $\Rightarrow m_{AB} = m_{CD} \Rightarrow \frac{۳}{-۴} = -\frac{۳}{m+1}$

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B (۳, ۱)

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

C (m, y)

$-\frac{۳}{۴} \times \frac{1-y}{m} = -1 \Rightarrow \frac{۳y-۳}{۴} = 1 \Rightarrow ۳y-۳=4 \Rightarrow y=3$

D (-1-m, y+۳)

C = $\begin{pmatrix} m \\ ۳ \end{pmatrix}$

$\sqrt{\Delta x^2 + \Delta y^2} \Rightarrow \sqrt{9+14} \rightarrow \sqrt{۲۵} = ۵$

$\sqrt{\frac{9}{۴} + ۳} \Rightarrow \sqrt{\frac{۲۵}{۴}} \Rightarrow \frac{۵}{۲} = ۲,۵$

$P = (۵ + \frac{۴}{۵}) \times ۲ \Rightarrow \frac{۱۰}{۵}$
کمیاضیف

۳) $۲m m + (m^2 - 1)y = ۳ \times$ مقدار باجهت سبب محور m هزاران ۴۰ می سازد.

اختلاف قائم m

$(m^2 - 1)y = -۲mm + ۳ \Rightarrow y = \frac{-۲m}{m^2 - 1} m + \frac{۳}{m^2 - 1}$

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$\tan 4.0^\circ \leq \sqrt{۳} \Rightarrow -\frac{۲}{m^2 - 1} \leq \sqrt{۳} \Rightarrow \sqrt{۳} m^2 + ۲m - \sqrt{۳} \leq \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{۴+۱۲}}{\sqrt{۳}}$

$\frac{۴}{\sqrt{۳}} \times \frac{\sqrt{۳}}{\sqrt{۳}} \leq \frac{۴\sqrt{۳}}{۳}$ ←

دائرة AH = P

(4)

C(5,11) B(3,3) A(1,9)

معادلات BC $\rightarrow \frac{11-3}{5-3} = 4$

$4m + b = y$

$4m - 3 = y \leftarrow BC$

$4(5) + b = 11$

AH مماس BC A مماس

$b = -19$

$4m - y - 3 = 0$ A(1,9)

$|am_1 + y_1 + c|$
 $\sqrt{a^2 + b^2}$

$\frac{|4 - 9 - 3|}{\sqrt{16}} \Rightarrow \frac{10}{\sqrt{16}} \times \frac{\sqrt{8}}{\sqrt{8}} = \sqrt{8}$

BA = $y + 2m = 11$

دائرة BH = P

(5)

AC = $4y - 3m = 11$

BC = $2y - 5m = -19$

من $BC \Rightarrow 2y = 5m - 19$ AB $\Rightarrow y = -2m + 11$

$y = \frac{5}{2}m - \frac{19}{2}$ $\leftarrow$ نضع $-2m + 11 = \frac{5}{2}m - \frac{19}{2}$

المحلل

$\frac{33}{2}m = \frac{11}{2}m$

$33m = 11m \Rightarrow m = 3$

BH مماس AC

B(3,11) AC = $4y + 3m + 11 = 0$

$y = 1$

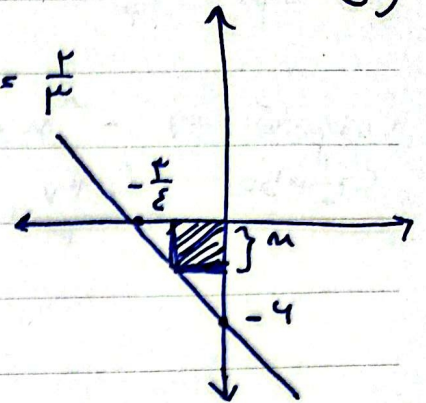
$\frac{|9 - 4 + 11|}{\sqrt{16 + 9}} = \frac{16}{\sqrt{25}} \Rightarrow \boxed{3, 1}$ باس



$$\frac{m}{\frac{r}{2}} = \frac{y-m}{\frac{r}{2}} \rightarrow 4m = \frac{y}{r} - \frac{r}{2}m \rightarrow \frac{r}{2}m = \frac{y}{r}$$

مربع $\square$ $a \rightarrow$ قطر $= a\sqrt{2}$
 $\sqrt{2} \times \frac{r}{2} = \frac{r}{2}\sqrt{2}$ قطر مربع

$$m = \frac{y}{\frac{r}{2}} = \frac{2y}{r}$$



$$y = am + 1$$

$$ay = m + a - 1 \rightarrow y = \frac{1}{a}m + \frac{a-1}{a}$$

$$c \neq c'$$

$$1 \neq \frac{a-1}{a} \checkmark$$

$$اسطوار \rightarrow a = \frac{1}{a} \rightarrow a^2 = 1 \quad a = \pm 1$$

$$y = m + 1 \rightarrow y = m \xrightarrow{(1,2)} \underline{r = 1 + 1} \checkmark$$

$$y = -m + 1 \rightarrow y = -m + r \xrightarrow{(1,2)} x \quad r = -1 + r, \quad r = -1 + 1 \quad x$$

$$\frac{y-m-1=0}{y-m=0} \Rightarrow \frac{|c-c'|}{\sqrt{a^2+b^2}} = \frac{|0-(+1)|}{\sqrt{r}} \Rightarrow \frac{1}{\sqrt{r}} = \left[\frac{\sqrt{r}}{r} \right]$$

$$\sqrt{d^2 - \left(\frac{\sqrt{r}}{r}\right)^2} \xrightarrow{\text{انذاره قطر } \frac{d}{2}} = \sqrt{r^2 - \frac{1}{r}} \rightarrow \left(\frac{V\sqrt{r}}{r} \right)$$

$$S = \frac{V\sqrt{r}}{r} \times \frac{\sqrt{r}}{r} = \left[\frac{V}{r} \right]$$

$$y = \frac{1}{\sqrt{3}}x - \frac{1}{\sqrt{3}} \quad m_{AC} = -\sqrt{3} \rightarrow y = -\sqrt{3}(x-4) \quad y = -\sqrt{3}x + 12 \quad (A)$$

نقطه برخورد $\Rightarrow -\sqrt{3}x + 12 = \frac{1}{\sqrt{3}}x - \frac{1}{\sqrt{3}}$ در دو سمت $(\frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}})$
 خواص $\hookrightarrow \frac{m_V}{m} = 1.0m \quad \boxed{x = 3.7, y = 0.9}$ B است $\hookrightarrow \max S \leftarrow C$

$$AC = \sqrt{(0, 3)^2 + (0, 9)^2} = 0.3\sqrt{10} \quad (2)$$

$$BC = \sqrt{(2, 7)^2 + (0, 9)^2} = 0.9\sqrt{10}$$

$$S = \frac{AB \times BC}{P} \Rightarrow \frac{0.3\sqrt{10} \times 0.9\sqrt{10}}{2} = 1.35$$

$$m = \sqrt{3} \rightarrow \frac{b-a}{-\frac{1}{\sqrt{3}} + \frac{1}{\sqrt{3}}} \rightarrow b-a = \frac{\sqrt{3}}{4} \quad \begin{matrix} (-\frac{1}{\sqrt{3}}, a) \\ (-\frac{1}{\sqrt{3}}, b) \end{matrix} \quad (4)$$

$$\sqrt{\left(\frac{\sqrt{3}}{4}\right)^2 + \frac{1}{16}} \Rightarrow \sqrt{\frac{3}{16} + \frac{1}{16}} \Rightarrow \frac{2}{4} \leq \frac{1}{\sqrt{3}} \quad \text{نسبت خط Δ به قطر مربع؟}$$

a طول ضلع مربع $\hookrightarrow$ $\frac{a\sqrt{2}}{\text{طول قطر}}$

$$\frac{1}{\sqrt{3}} \times \sqrt{2} \rightarrow \left(\frac{1}{\sqrt{3}}\sqrt{2}\right) \text{ (قطر مربع)}$$

$$\sqrt{(3)^2 + (4)^2} = 5 \text{ مساحت دایره}$$

$$m_{OA} = \frac{4}{3} \rightarrow m_{BC} = \frac{4}{3} \quad BC: y = \frac{4}{3}x + b \Rightarrow 3y = 4x + 3b \Rightarrow 0$$

نقطه برخورد $BC \rightarrow \frac{|3y - 4x - 3b|}{5} = 5 \Rightarrow -3b = 25 \quad (b = -\frac{25}{3}) \quad \text{در دو سمت}$

$$BC: y > \frac{4}{3}x + \frac{25}{3} \quad BC: y < -\frac{4}{3}x + \frac{25}{3}$$

$$m_{AB} = -\frac{3}{4} \quad y + 4 = -\frac{3}{4}(x+3) \Rightarrow y = -\frac{3}{4}x - \frac{15}{4}$$

$$\hookrightarrow AB: y = \frac{3}{4}x + \frac{25}{4}$$

$$m = \frac{-25 - 10}{-14 - 9} = -\frac{35}{23}$$

$$\boxed{y = -1} \quad \boxed{m = +7}$$

میانگین

