

$A(2, -2) B(2, 8)$

سوال 1:

$\cdot A \text{ را به } \frac{1}{V} = \frac{1+y}{1-x} \Rightarrow x = \frac{1+y}{V} \rightarrow m = \frac{1}{V} \quad y = ax + b \rightarrow y = \frac{1}{V}x + b \xrightarrow{(2,8)} 8 = \frac{1}{V} + b \Rightarrow b = \frac{7}{V}$

$AB \left(\frac{2+\frac{7}{V}}{2}, \frac{1-2}{2} \right) \Rightarrow (2, 1)$

$y = \frac{1}{V}x + \frac{7}{V}$

2

$A(2, 1) B(-2, 7) C(-1, 3)$

سوال 2:

$\overline{AC} = \sqrt{(-3)^2 + (6)^2} = 3\sqrt{5}$

$\cdot C \text{ را به } m = \frac{7-1}{-2-2} = \frac{-6}{-4} = \frac{3}{2} \rightarrow y = \frac{3}{2}x + b \xrightarrow{(-1,3)} 3 = \frac{3}{2}(-1) + b \rightarrow b = \frac{9}{2}$

3

$\overline{AH} = \frac{|1 + \frac{9}{2} - \frac{3}{2}|}{\sqrt{1 + \frac{9}{4}}} = \frac{\frac{5}{2}}{\frac{\sqrt{13}}{2}} = \frac{5}{\sqrt{13}}$

$BC - AH = 5 - 2 = 3$

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

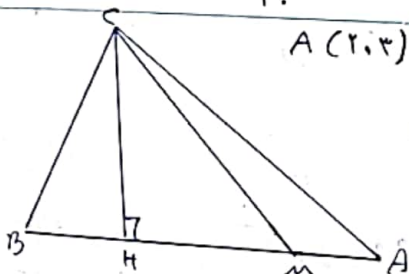
$y = ax + 2 \Rightarrow y - ax = 2$

فاصله $= \frac{|1-2|}{\sqrt{4+(-2)^2}} = \frac{1}{\sqrt{5}} = \frac{1\sqrt{5}}{\sqrt{5} \cdot 2} = \frac{\sqrt{5}}{2} \rightarrow$ قطر دایره

سوال 3:

4

$s = \pi r^2 \rightarrow \pi \times \left(\frac{\sqrt{5}}{2} \right)^2 = 1.25\pi$



$A(2, 4) B(5, 1) C(-1, -3)$

سوال 4:

$m_{AB} = \frac{4-1}{2-5} = \frac{3}{-3} = -1 \rightarrow m_{CH} = 1$

فاصله نقطه M از H = فاصله M از پاره خط CH

$y = x + b \xrightarrow{(-1, -3)} -3 = -1 + b \rightarrow b = -2$

$\overline{MH} = \frac{|2 - 3 + 2|}{\sqrt{2}} = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

5

$(m+1)x - (3m-2)y + 1 = 0 \quad (3n-2)x + (a-m)y - 4 = 0$

سوال 5:

6

$\cdot m \text{ را به } m \cdot m' = -1$

$\frac{-(m+1)}{-(3m-2)} \cdot \frac{-(3m-2)}{a-m} = -1 \Rightarrow \frac{m+1}{-3m+2} = \frac{a-m}{3m-2} \rightarrow 3m^2 - 16m + 2 = -3m^2 - m + 2$

$\Delta = 179 - 34 = 145 > 0$

$AB = x + y = 3$

$AC = y = 2n - 1$

$BC = 2x + y = 4$

$y = 3 - x$
 $y = 2n - 1$

$3 - x = 2n - 1 \Rightarrow x = 4 - 2n$
 $x + y = 3$

$x + y = 3$
 $-x + 2 = -2n + 1$

$y = 2n - 1$
 $y = -x + 3$

$2n - 1 = -x + 3 \rightarrow x = 4 - 2n$
 $x + y = 3$
 $x + y = 4$
 $-x + 2 = -2n + 1$
 $n = 0 \rightarrow y = -1$

$A(1, 1) B(\frac{3}{2}, \frac{1}{2}) C(0, -1)$

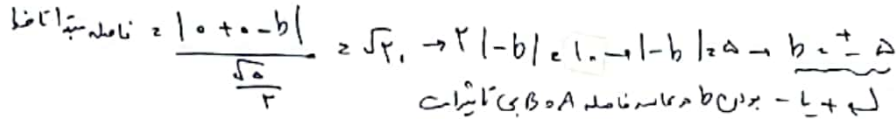
فاصله نقطه C
 $\frac{\frac{3}{2} + 1}{\frac{3}{2} - 0} = \frac{\frac{5}{2}}{\frac{3}{2}} = \frac{5}{3} = 1$
 $y = -x + b \rightarrow -1 = -0 + b \rightarrow b = -1$
 $y = -x - 1$
فاصله نقطه B

7

$$n_2 \left(\frac{\frac{\Delta}{r} + \Delta}{r}, \frac{\frac{v}{r} - 1}{r} \right) = \left(\frac{1}{r}, \frac{v}{r} \right) \rightarrow AM_r \sqrt{\left(1 - \frac{1}{r}\right)^r + \left(1 - \frac{v}{r}\right)^r} = \frac{\Delta \sqrt{v}}{r}$$

سوال: ۲

$$y \in \frac{1}{r} a + b \rightarrow az = 0 \rightarrow B = b$$



① $z \rightarrow y \quad z \rightarrow x \quad \frac{1}{r} \rightarrow$

② $y \rightarrow x \rightarrow \frac{x}{m}$

$$\textcircled{P} \text{CvB} \Rightarrow \frac{m}{r} - \frac{r}{1-m} z = \frac{-\delta}{r} \rightarrow \frac{m+\delta}{r} z = \frac{r}{1-m} \Rightarrow (m+\delta)(1-m) = r \rightarrow m^r - \delta m + \delta z = 0 \rightarrow m z^r$$

$$\textcircled{P} \text{CvB} \Rightarrow m z^r \quad m z = r + \sqrt{0} \quad m z = r - \sqrt{0} \rightarrow \text{ideob} = r \alpha (-r + \sqrt{0})(-r - \sqrt{0}) = -r^2$$

$$\frac{x_{A'} + r}{r} = r \rightarrow x_{A'} = r, \quad \frac{y_{A'} + 1}{r} = -r \rightarrow y_{A'} = -\delta \quad n' = y = rn + b$$

(5): 9 سال

$$\xrightarrow{(r, \delta)} -\delta = r(r) + b$$

$$\boxed{r = rn - 9}$$

سؤال ١:

$$m_{AB} z^{-1} \xrightarrow{(1, \tau)} y^{z-n+b} \rightarrow y^{z-1+b-b\tau} \rightarrow y^{z-n+\tau}$$

$$m_B = \frac{x_A + x_{A'}}{r} = 1 \rightarrow \frac{1 + x_{A'}}{r} \rightarrow x_{A'} = r - 1 = 0$$

$$b - a \rightarrow 17 + 210$$