

3/1

"17/1/1437"

17/1/1437

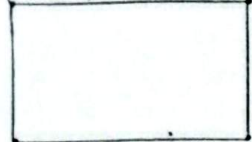


$$m = \frac{y_2 - y_1}{x_2 - x_1} \Rightarrow \frac{-1}{1} = \frac{m - k}{1 - (-1)} \Rightarrow m - k = -1$$

A(-1, k) B(1, m)

$$a = \sqrt{(1 - (-1))^2 + (m - k)^2} = \sqrt{4 + (-1)^2} = \sqrt{5} \Rightarrow S = \boxed{4\omega}$$

A(-1, 1) B(1, 1)



$$AB \parallel CD \Rightarrow \frac{1 - 1}{-1 - 1} = \frac{-1}{1 + 1} \Rightarrow 1 + 1 = 1 \Rightarrow 2 = 1$$

$$AB \perp BC \Rightarrow \frac{-1}{1} \times \frac{1 - 1}{1 - 1} = -1 \Rightarrow \frac{1 - 1}{1} = -1 \Rightarrow 1 = -1$$

D(-1, -1) C(1, -1) $\Rightarrow (1, -1)$

$$AB = \sqrt{1^2 + 1^2} = \sqrt{2}$$

$$BC = \sqrt{1^2 + 1^2} = \sqrt{2} \quad \text{جواب} \quad \boxed{1\omega} \quad \leftarrow$$

$$1m + (m^2 - 1)y - 1 = 0 \quad \tan \theta = \sqrt{3} \quad \text{نسبة} : \frac{-1m}{m^2 - 1} = \sqrt{3}$$

$$\sqrt{3}m^2 - \sqrt{3} = -1m \Rightarrow \sqrt{3}m^2 + 1m - \sqrt{3} = 0 \Rightarrow \Delta: 1 - 4(\sqrt{3})(-\sqrt{3}) = 19$$

$$\frac{-1 + \sqrt{19}}{2\sqrt{3}} = \frac{1}{2\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{2} = \boxed{\frac{\sqrt{3}}{2}} \quad \frac{\sqrt{3}}{2} - \sqrt{3} = \boxed{-\frac{\sqrt{3}}{2}} \quad \text{جواب}$$

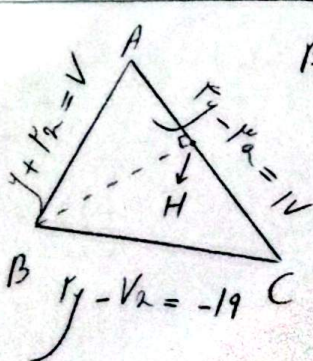
$$\frac{-1 - \sqrt{19}}{2\sqrt{3}} = \frac{-1}{2\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{-\sqrt{3}}{2} = \boxed{-\frac{\sqrt{3}}{2}} \quad \frac{\sqrt{3}}{2} \quad \leftarrow$$



$$AH = ? \quad m_{BC} = \frac{11 - 1}{1 - 1} = \text{undefined} \Rightarrow y - 1 = 1(x - 1)$$

$$\Rightarrow BC \perp AH \Rightarrow y - 1 + 1 = 0$$

$$B(1, 1) H C(1, 11) \quad BC \perp AH : \frac{|1 - 1 + 1|}{\sqrt{(1)^2 + (1)^2}} = \frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{1}{\sqrt{2}} = \boxed{\frac{\sqrt{2}}{2}}$$



$$\begin{cases} y + 1 = 1 \\ 1y - 1 = -1 \end{cases} \Rightarrow \begin{cases} -1y - 1 = -1 \\ 1y - 1 = -1 \end{cases} \Rightarrow \begin{cases} 2 = 1 \\ 1 = 1 \end{cases}$$

$$\frac{|1 - 1 - 1|}{\sqrt{1^2 + 1^2}} = \frac{1}{\sqrt{2}} = \boxed{\frac{\sqrt{2}}{2}}$$

6

$\begin{cases} -\frac{1}{\sqrt{2}}a + b = 0 \Rightarrow -\frac{1}{\sqrt{2}}a = -4 \Rightarrow a = -4\sqrt{2} \\ b = 4\sqrt{2} \end{cases}$

$-l = +1l - 4 \Rightarrow l = \frac{4}{2} = 2$

$\Rightarrow \sqrt{2} \times \frac{4}{\sqrt{2}} = \frac{4\sqrt{2}}{\sqrt{2}} = 4$

جواب: $a = -4\sqrt{2}$, $b = 4\sqrt{2}$, $l = 2$

خط: $-1x - 4y = 4$

نقطه: $(-4, 0)$, $(0, -1)$

مساحت: $\frac{1}{2} \times 4 \times 1 = 2$

جواب: $a = -4\sqrt{2}$, $b = 4\sqrt{2}$, $l = 2$

7

خط: $ay - 2 = a - 1$

خط: $y - 2 = 1$

نقطه: $(1, 2)$

$\frac{1}{a} = \frac{a}{1} \Rightarrow a = \pm 1$

مساحت: $\frac{1}{2} \times 1 \times 1 = \frac{1}{2}$

جواب: $a = 1$

خط: $y = 2$

خط: $y = 2 + 1$

مساحت: $\frac{1}{2} \times 1 \times 1 = \frac{1}{2}$

جواب: $a = 1$

خط: $y = 2$

خط: $y = 2 + 1$

مساحت: $\frac{1}{2} \times 1 \times 1 = \frac{1}{2}$

جواب: $a = 1$

8

خط: $2 - 3y - 1 = 0$

نقطه: $A(2, 0)$

مساحت: $\frac{1}{2} \times 2 \times 1 = 1$

جواب: $a = 1$

خط: $2 - 3y - 1 = 0$

نقطه: $A(2, 0)$

مساحت: $\frac{1}{2} \times 2 \times 1 = 1$

جواب: $a = 1$

$$AB = \left(-\frac{1}{r} + \frac{1}{r}, b-a\right) \rightsquigarrow \left(\frac{1}{4}, b-a\right) \quad \frac{b-a}{\frac{1}{4}} = \sqrt{r} \Rightarrow a-b = \frac{\sqrt{r}}{4}$$

$$|AB| = \sqrt{\underbrace{\left(\frac{1}{\mu}\right)^2}_{\frac{\sqrt{\mu}}{\mu}} + (b-a)^2} = \sqrt{\frac{\mu}{\mu^2} + \frac{1}{\mu^2}} = \frac{1}{\mu} \quad \text{d.h.} \quad \frac{1}{\mu} \sqrt{\mu} = \frac{\sqrt{\mu}}{\mu}$$

$\rho = \sqrt{(-3)^2 + (-4)^2} = 5$
 $\frac{-4}{-5} = \frac{4}{5} \rightarrow m = \frac{-4}{5}$

$\omega = \frac{|b|}{\sqrt{(\frac{r}{\mu})^2 + 1}}$: باطل کردن زاویه $m_r = \left\lceil \frac{r}{\mu} \right\rceil$ $\Rightarrow |b| = \frac{r_2}{\mu}$

ابن کثیر نے جس کا حصہ ۲ باب ۱۰ مندرجہ سب سے امیر کا حصہ باب ۱

$$\left. \begin{aligned} y &= \frac{\mu}{\kappa}x + b \quad \text{معادله خط اول} \\ y + \kappa &= \frac{-\mu}{\kappa}(x + \mu) \quad \text{معادله خط دوم} \end{aligned} \right\} \Rightarrow \text{نقطه برخورد آنها } (-\mu, -1) \text{ است.}$$

$$\text{محض } x \text{ حاصل} = -\mu x - 1 = \boxed{\mu}$$