

$$\frac{m-K}{r-(-r)} = \frac{m-K}{4} = \frac{-1}{r} \Rightarrow m = K - r$$

$$AB \text{ mod } i \rightarrow AB^r = (K - (-r)) + (m - K)^r = r + (-r)^r = K$$

$$AB = \sqrt{FA} \Rightarrow s = \sqrt{FA} \times \sqrt{FA} = \underline{\underline{FA}}$$

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

$$C(1, a, y), D(-r, a, y+r)$$

$\Rightarrow \vec{AB} = B - A = (4, -3)$, $\vec{BC} = C - B = (-1, 4, y-1)$

$$\vec{AB} \cdot \vec{BC} = 0 \Rightarrow (-1, 1) + (-3)(y-1) = 0 \Rightarrow -3y - 3 = 0 \Rightarrow y = -1$$

$$\Rightarrow C(1, \omega, -1), D(-1, \omega, 1) \Rightarrow BC = \sqrt{(-1, \omega) \cdot (-1, \omega)} = 1, \omega$$

$$P = \gamma(AB + BC) = \gamma(\Delta + \gamma, \Delta) = \boxed{1\Delta}$$

$$a = -\frac{r_m}{m^2 - 1} = \tan 40^\circ = \sqrt{r} \Rightarrow \sqrt{r} m^2 + r_m - \sqrt{r} = 0$$

$$m = \frac{-r \pm \sqrt{r^2 + 12}}{r\sqrt{3}} \Rightarrow m_1 = \frac{1}{\sqrt{3}}, m_2 = -\frac{1}{\sqrt{3}}$$

$$|m_i - m_r| = \left| \frac{1}{\sqrt{\mu}} - (-\sqrt{\mu}) \right| = \frac{1}{\sqrt{\mu}} + \sqrt{\mu} = \frac{\kappa}{\sqrt{\mu}} \Rightarrow \boxed{\frac{\sqrt{\mu}}{\mu}}$$

$$m = \frac{11 - \mu}{\sqrt{1 - \mu}} = \frac{1}{\kappa} = r$$

$$y - 3 = 2(x - 3) \Rightarrow y = 2x - 3$$

$$\text{Abstand} \rightarrow \frac{|2(1) - 9 - 3|}{\sqrt{5}} = \frac{10}{\sqrt{5}} = 2\sqrt{5}$$

$$B \rightarrow y + vx = v \Rightarrow y = v - vx \Rightarrow 1x - vx - vx = -1 \Rightarrow 1x = vx \Rightarrow x = v, y = 1$$

$$AC \text{ jil } B \text{ ludi} \rightarrow \frac{|K-9-10|}{\sqrt{20}} = \frac{21}{\sqrt{20}} = \boxed{4,4}$$

$$\frac{y}{-4} + \frac{x}{\frac{1}{\sqrt{2}}} = 1 \Rightarrow y = -4 - 1x \xrightarrow{\text{مربع}} x = -4 - 1x \Rightarrow 9x = -4 \Rightarrow x = -\frac{4}{9}$$

$$S = \frac{-\frac{4}{9} \times \frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}}} = \frac{4}{9}$$

$$\text{مساحت} = \sqrt{\frac{4 \times 4}{9}} = \frac{4\sqrt{2}}{3}$$

6

$$m_1 = a, m_2 = \frac{1}{a} \Rightarrow a = \frac{1}{a} \text{ (مضرب)} \Rightarrow a^2 = 1 \Rightarrow a = \pm 1$$

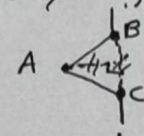
$$\left. \begin{array}{l} a=1 \rightarrow y-x=1, y-x=0 \Rightarrow \frac{|c_1-c_2|}{\sqrt{2}} = \frac{1}{\sqrt{2}} \\ a=-1 \rightarrow y+x=1, y+x=2 \Rightarrow \frac{|c_1-c_2|}{\sqrt{2}} = \frac{1}{\sqrt{2}} \end{array} \right\} ①$$

$$\frac{1}{\sqrt{2}} \Rightarrow L^2 = 2\Delta - \frac{1}{2} = \frac{4\Delta}{2} \Rightarrow L = \frac{\sqrt{2}}{\sqrt{2}} \text{ ②}$$

$$\text{① و ②} \Rightarrow S = \frac{\sqrt{2}}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

7

ارتفاع و مساحت و ... $\rightarrow \frac{|1(4) + (-3)(0) - 1|}{\sqrt{10}} = \frac{3}{\sqrt{10}} \Rightarrow$

$$S = \frac{1}{2} \times \frac{3}{\sqrt{10}} \times \frac{3}{\sqrt{10}} = \frac{9}{20}$$


8

$$\frac{a-b}{\frac{-1}{2} + \frac{1}{3}} = \sqrt{3} \Rightarrow \frac{-\sqrt{3}}{4} = a-b$$

$$\sqrt{\left(\frac{-\sqrt{3}}{4}\right)^2 + \left(\frac{1}{4}\right)^2} = \sqrt{\frac{3}{16} + \frac{1}{16}} = \frac{2}{4} = \frac{1}{2} \Rightarrow S = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$$

$$\text{مساحت} = \sqrt{2S} \Rightarrow \sqrt{2 \times \frac{1}{4}} = \frac{\sqrt{2}}{2} = \frac{\sqrt{2}}{2} \rightarrow \frac{\sqrt{2}}{2}$$

9

$$\sqrt{(-3)^2 + (-4)^2} = 5, m_1 = \frac{-4}{-3} = \frac{4}{3} \Rightarrow m_2 = -\frac{3}{4}$$

$$L \text{ bis} \rightarrow y+4 = \frac{3}{4}(x+3) \rightarrow y = \frac{3}{4}x - \frac{5}{4}$$

$$y = \frac{3}{4}x + b \rightarrow 3x - 4y + 3b = 0 \Rightarrow \frac{|3b|}{5} = \frac{|3b|}{5} \Rightarrow |3b| = 25$$

$$\text{پس} \rightarrow y = \frac{3}{4}x + \frac{25}{3}$$

$$\frac{3}{4}x - \frac{5}{4} = \frac{3}{4}x + \frac{25}{3} \Rightarrow y = \frac{3}{4}(-1) + \frac{25}{3} = \frac{-3+100}{12} = \frac{97}{12}$$

$$(-1, -1) \text{ نقطه} \rightarrow x \cdot y = (-1) \cdot (-1) = 1$$

10