

شیب: $\frac{m-k}{4} = -\frac{1}{2} \rightarrow m-k = -2$

$\overline{AB}$: $\sqrt{(m-k)^2 + (4)^2} = \sqrt{40} \rightarrow$ ضلع

$S = (\sqrt{40})^2 = 40$

$m_{\overline{AB}} = m_{\overline{CD}} \Rightarrow \frac{2}{-2} = \frac{2}{-1-2m} \Rightarrow m = \frac{2}{2} \quad \overline{AB} \text{ عمود بر } \overline{BC}$

$m_{\overline{BC}}: \frac{2}{2} = \frac{y-1}{\frac{2}{2}-2} \Rightarrow y = -1 \quad \overline{CB} = \sqrt{(1,0)^2 + 2^2} = 2,0$

$\overline{AB} = \sqrt{20} = 2$

مساحت = $2(2+2,0) = 10$

$2m + (m^2-1)y = 2 \quad \tan \alpha = \sqrt{3} \Rightarrow \alpha = 60^\circ \quad \frac{-2m}{m^2-1} = \sqrt{3}$

$\sqrt{3}m^2 + 2m - \sqrt{3} = 0 \quad \begin{cases} m_1 = \frac{1}{\sqrt{3}} \\ m_2 = \frac{-2}{\sqrt{3}} \end{cases} \quad \frac{1}{\sqrt{3}} - \left(-\frac{2}{\sqrt{3}}\right) = \frac{3}{\sqrt{3}}$

$A: \begin{vmatrix} 1 \\ 9 \end{vmatrix} \quad B: \begin{vmatrix} 2 \\ 3 \end{vmatrix} \quad C: \begin{vmatrix} 4 \\ 11 \end{vmatrix} \Rightarrow \overline{BC} = y = 2x - 3$

$\overline{AH} = \frac{9-2+3}{\sqrt{5}} = \frac{10}{\sqrt{5}} = 2\sqrt{5}$

$\overline{AB}: y = -2x + 4$

$\overline{BC}: y = \frac{1}{2}x - \frac{19}{2} \Rightarrow -2x + 4 = \frac{1}{2}x - \frac{19}{2} \Rightarrow x = 3 \quad y = 1 \quad B: \begin{vmatrix} 2 \\ 1 \end{vmatrix}$

$\overline{AC}: 4y - 2x - 14 = 0 \quad \overline{BH} = \frac{|-14-9+4|}{5} = \frac{19}{5} = 3,8$

فاصله نقطه B از خط AC

$$m = \frac{-4}{\frac{r}{r}} = -1 \rightarrow y = -1x - 4 \quad x = -1x - 4 \Rightarrow x = -\frac{r}{r}$$

$$\frac{2\sqrt{r}}{r} \text{ قطر مربع}$$

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

$$y - ax = 1 \rightarrow m = a$$

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

غير قابل قبول

$$\Rightarrow \begin{cases} y = x \\ y = x + 1 \end{cases} \quad \text{فاصله دو خط موازی: } \frac{|1-0|}{\sqrt{2}} = \frac{1}{\sqrt{2}} \quad \sqrt{\frac{1}{r^2} + x^2} = a \Rightarrow x = \frac{V}{\sqrt{r}} \quad S = \frac{V}{\sqrt{r}} = \frac{V}{r}$$

$$y = \frac{x}{r} - \frac{1}{r} \rightarrow \frac{x}{r} - \frac{1}{r} = -rx + 12 \rightarrow x = \frac{rV}{r}$$

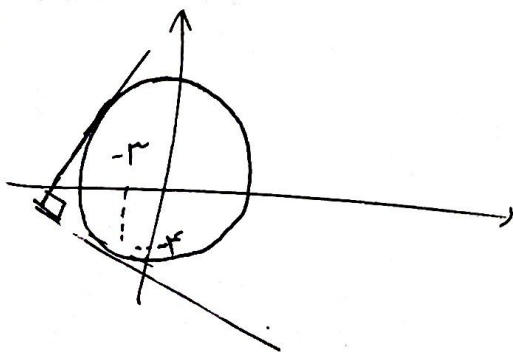
$$y = -rx + 12$$

$$y = 0,9$$

$$\rightarrow S = r \times \frac{9}{10} \times \frac{1}{r} = \frac{rV}{10}$$

$$A: \left| \begin{matrix} -\frac{1}{r} \\ b \end{matrix} \right| \quad B: \left| \begin{matrix} -\frac{1}{r} \\ a \end{matrix} \right| \quad m = \frac{b-a}{\frac{1}{r}} = \sqrt{r} \Rightarrow b-a = \frac{\sqrt{r}}{r}$$

$$\Rightarrow \overline{AB}: \sqrt{(b-a)^2 + \left(\frac{1}{r}\right)^2} = \sqrt{\frac{r}{r^2}} = \frac{r}{r} \Rightarrow \text{قطر} = \sqrt{r} \times \frac{r}{r} = \frac{\sqrt{r}}{r}$$



$$-rx - r = 12$$