

نام و نام خانوادگی پاشنه تشریحی تکلیف شماره ۱۸... کلاس: یازدهم مهر
 ...پیش از این ...

$$AB: y = -\sqrt{x+2} \Rightarrow d, y = \frac{1}{\sqrt{x}} + b \Rightarrow 1 = \frac{3}{\sqrt{x}} + b \Rightarrow b = \frac{2}{\sqrt{x}}$$

$$d: y = \frac{1}{\sqrt{x}} + \frac{2}{\sqrt{x}} \quad M \left| \begin{array}{c} x_A + x_B \\ y_A + y_B \end{array} \right.$$

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$$\overline{BC} = \sqrt{3^2 + 4^2} = \sqrt{25} = 5 \quad BC: y = -\frac{4}{3}x + \frac{25}{3} \Rightarrow 3y + 4x - 25 = 0$$

$$\overline{AH} = \frac{|3 \cdot 12 - 4 \cdot 5|}{\sqrt{3^2 + 4^2}} = \frac{10}{5} = 2$$

$$\overline{BC} - \overline{AH} = 5 - 2 = 3$$

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$$\begin{cases} 4y - 2x = 2 \\ 2y - x = 1 \end{cases}$$

$$\frac{4}{2} = \frac{-2}{-1} \Rightarrow a = 2$$

$$\Rightarrow \begin{cases} 4y - 2x = 2 \\ 2y - x = 1 \end{cases} \xrightarrow{\times 2} \begin{cases} 4y - 2x = 2 \\ 4y - 2x = 2 \end{cases}$$

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$$r = \frac{|12 - 1|}{\sqrt{2^2 + 1^2}} = \frac{11}{\sqrt{5}} \Rightarrow r = \frac{9}{\sqrt{5}} = \frac{3}{\sqrt{5}} \Rightarrow S = \pi r^2 = \frac{9}{5} \pi$$

$$MH = \frac{|AC - BC|}{AB}$$

$$\overline{AC} = \sqrt{3^2 + 4^2} = 5$$

$$\overline{BC} = \sqrt{4^2 + 3^2} = 5$$

$$\overline{AB} = \sqrt{3^2 + 4^2} = 5$$

$$\Rightarrow MH = \frac{|5 - 5|}{5} = \frac{0}{5} = 0$$

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$$y = \left(\frac{m+1}{2m-1} \right) x + \frac{1}{2m-1} \Leftrightarrow (x+1)(2m-1) = y+1$$

$$a_1 + a_2 = -1 \Rightarrow \frac{m+1}{2m-1} + \frac{1}{2m-1} = -1$$

$$y = \left(\frac{2m-2}{m-1} \right) x - \frac{1}{m-1} \Leftrightarrow (2m-2)x - (y+1) = 0$$

$$-2m^2 + 12m - 20 = 2m^2 + 4m - 2 \Rightarrow 4m^2 = 12m - 18 \Rightarrow 4m^2 - 12m + 18 = 0$$

به ازای هیچ مقداری $\Delta < 0$

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معادله

$$AB = AC \Rightarrow A(1,1)$$

$$2x + y = 1$$

$$2x - y = 1$$

$$\Delta y = \Delta \Rightarrow y = 1 \Rightarrow x = 1$$

$$AC = BC$$

$$2x - y = 1$$

$$x + y = 2$$

$$x = \frac{3}{2} \quad y = \frac{1}{2}$$

معادله

$$AB = BC \Rightarrow B = (\Delta, -1)$$

$$x + y = 3$$

$$x + y = 2$$

$$y = -1 \Rightarrow x = \Delta$$

$$M = (\Delta x, \Delta y) = M\left(\frac{1}{2}, \frac{1}{2}\right)$$

$$P_{\text{میان}} \Rightarrow y = -x + 2 \Rightarrow y + x - 2 = 0$$

$$AM = \sqrt{\left(\frac{3}{2}\right)^2 + \left(\frac{1}{2}\right)^2} = \frac{\sqrt{10}}{2}$$

$$AH = \frac{|1 \cdot 1 + 1 \cdot (-1)|}{\sqrt{1^2 + 1^2}} = \frac{2}{\sqrt{2}} = \sqrt{2}$$

$$\frac{AM}{AH} = \frac{\frac{\sqrt{10}}{2}}{\frac{\sqrt{2}}{1}} = \frac{\sqrt{10}}{2\sqrt{2}} = \frac{\sqrt{5}}{2}$$

$$d: y = -\frac{1}{2}x + b \Rightarrow \frac{|0 + 0 - b|}{\sqrt{1^2 + \left(\frac{1}{2}\right)^2}} = \frac{|b|}{\frac{\sqrt{5}}{2}} = \sqrt{2}\Delta \Rightarrow |b| = \Delta \Rightarrow b = \pm \Delta$$

$$A(\alpha, 0) \in d \Rightarrow 0 = -\frac{\alpha}{2} + b \Rightarrow \alpha = 2b$$

$$B(0, \beta) \in d \Rightarrow \beta = 0 + b \Rightarrow \beta = b$$

$$AB = \sqrt{\alpha^2 + \beta^2} = \sqrt{4b^2 + b^2} = \sqrt{5}b = \sqrt{5}|\Delta|$$

$$\Rightarrow AB = \Delta\sqrt{5} \checkmark$$

$$d: y = 2x - 3$$

قطعه از خط d است

نقطه A در خط d است

$$A' \begin{bmatrix} 2x_m - x_A \\ 2y_m - y_A \end{bmatrix} = \begin{bmatrix} 2 \\ -1 \end{bmatrix}$$

$$m_d = m_{d'} \Rightarrow$$

$$\Rightarrow d': y = 2x + b \Rightarrow -1 = 2 + b \Rightarrow b = -3$$

$$\Rightarrow d': y = 2x - 3 \checkmark$$

$$AH: y = -x + b \Rightarrow 1 = -1 + b \Rightarrow b = 2$$

$$\Rightarrow AH: y = -x + 2$$

$$d: y = x + \Delta \Rightarrow -x + 2 = x + \Delta \Rightarrow 2x = 2 - \Delta \Rightarrow x = \frac{2 - \Delta}{2}$$

$$\Rightarrow x = -1$$

$$\Rightarrow x = -1 \Rightarrow y = 3$$

$$A' \begin{bmatrix} 2x_H - x_A \\ 2y_H - y_A \end{bmatrix} = \begin{bmatrix} 2 \\ 3 \end{bmatrix}$$

$$\Rightarrow \begin{cases} a = 3 \\ b = 9 \end{cases} \Rightarrow 2b - a = 12 - 3 = 9 \checkmark$$

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Subject:

Year : Month : Day : ()

$$d_1: y = (1-m)x + y \stackrel{y=0}{\Rightarrow} 0 = (1-m)x + y \Rightarrow (1-m)x = -y \Rightarrow x = \frac{y}{m-1}$$

$$d_2: y = \frac{\epsilon}{m}x + y \stackrel{y=0}{\Rightarrow} \frac{\epsilon}{m}x = -y \Rightarrow x = -\frac{m}{\epsilon}$$

$$\text{فاصله} = \left| \frac{y}{m-1} + \frac{m}{\epsilon} \right| = \left| \frac{m^2 - m + \epsilon}{\epsilon m - \epsilon} \right|$$

$$d_1 = d_2 \Rightarrow (1-m)x + y = \frac{\epsilon}{m}x + y \Rightarrow \left(1-m - \frac{\epsilon}{m}\right)x = 0 \Rightarrow x=0 \quad y=2$$

فاصله‌های ارتفاع دایره بر قاعده
 زیرا در خط منطبق می‌شوند
 $1-m \neq \frac{\epsilon}{m}$
 همه را برقرار است
 $m^2 - m + \epsilon \neq 0 \quad \Delta < 0$

$$\frac{\text{ارتفاع} \times \text{قاعده}}{\epsilon} = \frac{\Delta}{\epsilon} \Rightarrow \left| \frac{m^2 - m + \epsilon}{\epsilon m - \epsilon} \right| \times \frac{\epsilon}{\epsilon} = \frac{\Delta}{\epsilon} \Rightarrow \left| \frac{m^2 - m + \epsilon}{\epsilon m - \epsilon} \right| \times \frac{\epsilon}{\epsilon} = \frac{\Delta}{\epsilon} \Rightarrow \left| \frac{m^2 - m + \epsilon}{m-1} \right| = \Delta$$

$$\Rightarrow \begin{cases} \frac{m^2 - m + \epsilon}{m-1} = \Delta \Rightarrow m^2 - m + \epsilon = \Delta m - \Delta \Rightarrow m^2 - \epsilon m + \epsilon + \Delta = 0 \Rightarrow (m-2)^2 = 0 \\ \frac{m^2 - m + \epsilon}{m-1} = -\Delta \Rightarrow m^2 - m + \epsilon = -\Delta m + \Delta \Rightarrow m^2 + \epsilon m - 1 = 0 \end{cases}$$

$$\boxed{m=2}$$

۲ مقدار برای m هر دو قابل قبول و ضرب = ۱-

$$-1 \times 2 = -2 \quad \checkmark$$