

نام و نام خانوادگی: قریب پاسخنامه تشریحی تکلیف شماره ۱۷... کلاس: نام: (صبر)

$$A(-2, k) \quad B(3, m) \quad m = \frac{m-k}{k+2} = \frac{m-k}{4} = -\frac{1}{2} \quad m-k = -2$$

$$|AB| = \sqrt{(m-k)^2 + (k+2)^2} = \sqrt{9+16} = \sqrt{25}$$

$$S = (AB)^2 \rightarrow (\sqrt{25})^2 = (5)^2 = \boxed{25}$$

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$$A(-1, 4) \quad B(3, 1) \quad C(x, y) \quad D(-1-x, y+3)$$

$$\alpha_A + \alpha_C = \alpha_B + \alpha_D \quad \alpha - 1 = 3 - 1 - \alpha \quad \alpha = \frac{3}{2}$$

$$|AB| = \sqrt{(3+1)^2 + (1-4)^2} = \sqrt{20} = 2\sqrt{5}$$

$$m_{AB} \times m_{BC} = -1 \quad -\frac{3}{2} \times \frac{y-1}{x-3} = -1 \rightarrow y = -1$$

$$|AD| = \sqrt{(-2, 5+1)^2 + (2-4)^2} = \sqrt{4+4} = 2\sqrt{2} \quad \rho = \frac{1}{2} \times (2 \times 2, 5) + (2 \times 5) = \boxed{15}$$

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$$2mx + (m^2 - 1)y = 2 \rightarrow y = \frac{-2m}{m^2 - 1}x + \frac{2}{m^2 - 1}$$

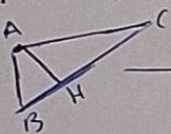
$$m = \tan 45^\circ = \sqrt{3} \rightarrow \frac{-2m}{m^2 - 1} = \sqrt{3} \quad m^2\sqrt{3} + 2m - \sqrt{3} = 0 \quad \Delta = (2)^2 - 4(\sqrt{3})(-\sqrt{3}) = 16$$

$$m = \frac{2 \pm \sqrt{16}}{2\sqrt{3}} \rightarrow m_1 = -\sqrt{3} \quad m_2 = \frac{1}{\sqrt{3}} \quad m_2 - m_1 = \frac{1}{\sqrt{3}} + \sqrt{3} = \boxed{\frac{4}{\sqrt{3}}}$$

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$$A(1, 9) \quad B(3, 3) \quad C(7, 11)$$



$$m_{BC} = \frac{11-3}{7-3} = 2 \rightarrow y = 2x - 3 \quad b = -3 \quad y = 2x - 3$$

$$AH = \frac{|y - 2x + 3|}{\sqrt{5}} = \frac{|9 - 2 + 3|}{\sqrt{5}} = \boxed{2\sqrt{5}}$$

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$$AB: y + 2x = 7 \quad AC: 4y - 3x = 17 \quad BC: 2y - 5x = -19$$

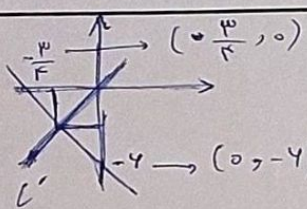
$$\begin{cases} y + 2x = 7 \\ 4y - 3x = 17 \end{cases} \rightarrow y = 7 - 2x \rightarrow 4(7 - 2x) - 3x = 17 \quad 11x = 11 \quad x = 1 \quad y = 5 \quad A(1, 5)$$

$$\begin{cases} y + 2x = 7 \\ 2y - 5x = -19 \end{cases} \rightarrow 2(7 - 2x) - 5x = -19 \quad -11x = -33 \quad x = 3 \quad y = 1 \quad B(3, 1) \rightarrow BH = \frac{|4 - 9 - 19|}{5} = \frac{24}{5}$$

$$\begin{cases} 4y - 3x = 17 \\ 2y - 5x = -19 \end{cases} \rightarrow 11x = 50 \quad x = \frac{50}{11} \quad y = 1 \quad C(\frac{50}{11}, 1) \quad \begin{cases} AC = \sqrt{(\frac{50}{11}-1)^2 + (1-5)^2} = 5 \\ BC = \sqrt{(\frac{50}{11}-3)^2 + (1-1)^2} = \frac{16}{11} \\ AB = \sqrt{(3-1)^2 + (1-5)^2} = 2\sqrt{5} \end{cases}$$

$$S = \frac{1}{2} \begin{vmatrix} 1 & 5 & 1 \\ 3 & 1 & 1 \\ \frac{50}{11} & 1 & 1 \end{vmatrix} \rightarrow \frac{1}{2} (-5 + 4 + 20) = \frac{1}{2} (19) = \boxed{11}$$

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$$m = \frac{-4-0}{0+\frac{4}{r}} = -\frac{4}{\frac{4}{r}} = -r \quad \begin{cases} -4 = -r(0) + b \\ b = -4 \end{cases}$$

$$L: y = x - 1 \quad -1x - 4 = x \quad -2x = 4 \quad x = -2 \quad y = -\frac{2}{r} \quad \textcircled{5}$$

$$|a| = \sqrt{r^2 |a|} = \left| \frac{2}{r} \sqrt{r} \right|$$

$$y - ax = 1 \rightarrow y = ax + 1 \quad ay - x = a - 1 \quad y = \frac{x}{a} + \frac{a-1}{a}$$

$$|a| = \frac{|c-c'|}{\sqrt{r}} = \frac{|1 - \frac{a-1}{a}|}{\sqrt{r}} = \frac{1}{\sqrt{r}}$$

$$|a| = \sqrt{r} |a| \rightarrow \omega = \sqrt{r} |a|$$

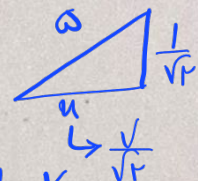
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$$a = \frac{1}{a} \quad a = \pm 1$$

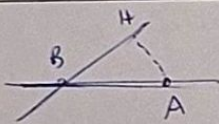
$$\left. \begin{array}{l} a=1 \rightarrow y=x+1 \quad r=2 \checkmark \\ y=x+0 \quad r=1 \times \end{array} \right\} a=1$$

$$\left. \begin{array}{l} a=-1 \rightarrow y=1-x \quad r=0 \times \\ y=2-x \quad r=1 \times \end{array} \right\}$$

$$S = \frac{1}{\sqrt{r}} \times \frac{\omega}{\sqrt{r}} = \left| \frac{\omega}{r} \right|$$



$$S = \frac{1}{\sqrt{r}} \times \frac{1}{\sqrt{r}} = \frac{1}{r}$$



$$AH = \frac{|1-0-1|}{\sqrt{10}} = \frac{2}{\sqrt{10}}$$

$$AB^2 = AH^2 + BH^2 \rightarrow 4 = \left(\frac{2}{\sqrt{10}}\right)^2 + BH^2 \quad BH = \frac{4}{\sqrt{10}}$$

$$S = \frac{1}{r} \times \frac{2}{\sqrt{10}} \times \frac{4}{\sqrt{10}} = \left| \frac{8}{r} \right| = 1,3 \omega$$

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

$$\sqrt{(b-a)^2 + \left(-\frac{1}{r} + \frac{1}{r}\right)^2} = \sqrt{\frac{1}{16} + \frac{r}{16}} = \frac{r}{4} = \frac{1}{r}$$

$$|a| = \sqrt{r} |a| = \frac{1}{r} \times \sqrt{r} = \left| \frac{\sqrt{r}}{r} \right|$$

$$L: y = \frac{r}{r} m + k$$

$$OA = \omega \quad OL = \frac{r}{\omega} k = a \rightarrow k = \frac{ra}{r} = a$$

$$\frac{ra}{r} = \frac{-14\omega}{12} = -\frac{7\omega}{6} = -\frac{7}{6} \times \frac{1}{\omega} = -\frac{7}{6\omega}$$

$$(-3, -4) \rightarrow m = -\frac{4}{3} \quad m = -\frac{4}{3} \rightarrow y = -\frac{4}{3}x + b$$

$$r = \sqrt{(r)^2 + (r)^2} = \omega \quad L: y = \frac{r}{r} x + b \quad |a| = \frac{r}{r} = \omega \quad |b| = \frac{r}{r} = \omega$$

$$|b| = \frac{r}{r} \rightarrow y = \frac{r}{r} x + \frac{r}{r}$$

$$\frac{r}{r} = \frac{r}{r} \rightarrow \frac{y}{x} = \frac{r}{r} \quad y = \frac{r}{r} x \quad x + y = 2\omega \quad \frac{r}{14} x = 2\omega \quad x = 14 \quad x = -r \quad (نامرکز شقی)$$

$$y = \frac{r}{r} (-r) = -r \quad (x, y) = k(r, -r) \rightarrow 9k^2 + 14k^2 = 2\omega \quad k^2 = 1 \quad k = \pm 1$$

$$\rightarrow (3, -4) \quad (r, -r)$$

$$\rightarrow (-3, 4) \quad (-r, r) \quad (-3) \times (4) = -12$$

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