

۱۸، ۷۵

نام و نام خانوادگی: مدرسه: پاسخنامه تشریحی تکلیف شماره ۱۶ کلاس یازدهم سر B

$$A(4, -6) / B(2, 8) \rightarrow M(3, 1)$$

$$L_{m_{AB}} = \frac{-6-8}{4-2} = -7 \xrightarrow{\text{عکس و قرینه}} \frac{1}{7} \rightarrow 2 \cdot \frac{1}{7}x + \frac{4}{7}$$

$$7y - x = 4 \quad \checkmark$$

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$$C(-1, 3) / B(-4, 7) / A(3, 1) \rightarrow BC = \sqrt{(-1+4)^2 + (3-7)^2} = 5 \quad \checkmark$$

$$m_{BC} = \frac{3-7}{-1+4} = \frac{-4}{3} \rightarrow 2 \cdot \frac{-4}{3}x + \frac{5}{3} \rightarrow 3y + 4x = 5$$

$$A \rightarrow BC = \frac{|3+12-5|}{\sqrt{16+9}} = 2 \quad \checkmark \rightarrow 5 - 2 = 3 \quad \checkmark$$

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$$\begin{aligned} 2y - x = 7 &\rightarrow 2 \cdot \frac{1}{2}x + 3/5 \\ 4y = ax + 2 &\rightarrow 2 \cdot \frac{a}{4}x + \frac{1}{2} \end{aligned} \rightarrow \frac{a}{4} = \frac{1}{2} \rightarrow a = 2 \quad \checkmark$$

$$L_{2y-x=7} \rightarrow 2y-x=7, 2y-x=2 \quad \text{فاصله} \rightarrow \frac{|7-2|}{\sqrt{5}} = \frac{5}{\sqrt{5}} = \sqrt{5} = r$$

$$Ar^2 = S_b \rightarrow \frac{5}{4} \quad \checkmark \quad r = \frac{r}{\sqrt{5}} \rightarrow S = \frac{9\pi}{5}$$

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$$AB \Rightarrow m_{AB} = \frac{3-1}{2-4} = -1 \rightarrow 2 \cdot -x + 5 \rightarrow 2x - x - 2$$

$$x - 2 = -x + 5 \rightarrow 2x = 7 \Rightarrow x = 3/5, 2 \cdot 1/5 = H(3/5, 1/5)$$

$$M(3, 2) \rightarrow MH = \sqrt{(3/5-3)^2 + (1/5-2)^2} = \sqrt{\frac{1}{2}} = \frac{\sqrt{2}}{2} \quad \checkmark$$

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$$(3m-2)x + (5-m)y - 7 = 0 \rightarrow 2 \cdot \frac{2-3m}{5-m}x + \frac{7}{5-m}$$

$$(m+1)x - (2m-4)y + 1 = 0 \rightarrow 2 \cdot \frac{m+1}{2m-4}x + \frac{1}{2m-4}$$

$$\frac{2-3m}{5-m} = \frac{m+1}{2m-4} = -1 \rightarrow \frac{-3m^2-m+2}{-2m^2+14m-20} = -1 \rightarrow \frac{-3m^2-m+2}{5m^2-13m+18} = 0$$

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$$m \text{ هیچ مقدار } \Delta < 0 \quad \checkmark$$

$$A(1,1)/B(5,-1)/C(\frac{5}{3}, \frac{7}{3}) \rightarrow \text{المساحة}$$

$$M(\frac{10}{3}, \frac{2}{3}) \rightarrow AM = \sqrt{(\frac{10}{3}-1)^2 + (\frac{2}{3}-1)^2} = \frac{\sqrt{50}}{3} = \frac{5\sqrt{2}}{3}$$

$$A, BC \rightarrow \frac{|1+1-4|}{\sqrt{2}} = \sqrt{2} \rightarrow \frac{\frac{5\sqrt{2}}{3}}{\frac{\sqrt{2}}{1}} = \boxed{\frac{5}{3}} \checkmark$$

$$L: -\frac{1}{2}x + C \rightarrow 2L + x - 2C \stackrel{[0]}{\rightarrow} \frac{1-2C}{\sqrt{4+1}} = \sqrt{20}$$

$$10, 1-2C \rightarrow C=5, -5 \xrightarrow{C=5} 2L+x-10 \rightarrow A(0,5) \quad B(10,0)$$

$$\sqrt{25+100} = \sqrt{125} = \boxed{5\sqrt{5}} \checkmark$$

$$L: (1-m)x + 2 \xrightarrow{\text{برسوز}} x=0, y=2 \xrightarrow{\text{برسوز}} x=\frac{2}{m-1}, y=-\frac{m}{2}$$

$$|\frac{2}{m-1} + \frac{m}{2}| = 2/5 \rightarrow \frac{4+m^2-m}{2m-2} = 2/5 \rightarrow m=3$$

$$\hookrightarrow \frac{4+m^2-m}{2m-2} = 2/5 \rightarrow m^2+4m-1=0 \rightarrow m = \frac{-4 \pm \sqrt{16+4}}{2} = \frac{-4 \pm \sqrt{20}}{2} = -2 \pm \sqrt{5}$$

$$L: 2x-3 \xrightarrow{m(2,2)} L: 2x-6$$

$$\hookrightarrow \frac{|-3+6|}{\sqrt{1+4}} = \frac{3}{\sqrt{5}} = \frac{3\sqrt{5}}{5} \rightarrow \boxed{L: 2x-9} \checkmark$$

$$\frac{6\sqrt{5}}{5} = \frac{|-3+x|}{\sqrt{1+4}} \rightarrow x=9$$

$$L: x+5, A(1,2) \quad \text{خواسته سوال: } r_b - a = \boxed{15}$$

$$\hookrightarrow L: x+3 \rightarrow -x+3 = x+5 \rightarrow H(-1, 4)$$

$$A(1,2) \quad x+5, y$$

$$L: x+3 \quad H(-1, 4)$$

$$B?$$

$$\frac{1+x}{2} = -1 \rightarrow \frac{2+x}{2} = 4 \rightarrow x=6$$

$$\boxed{B(-3, 6)} \checkmark$$