

نام و نام خانوادگی: ... پاسخنامه تشریحی تکلیف شماره ۱۷ ... کلاس یازدهم ...

$$A(-2, k) \quad m = \frac{y_B - y_A}{x_B - x_A} = \frac{m - k}{4 - (-2)} = \frac{-1}{2} \quad m - k = -2$$

$$B(4, m) \quad m = \frac{-1}{2} \quad AB = \sqrt{(4 - (-2))^2 + (m - k)^2} = \sqrt{40}$$

$$\text{مساحت} = (AB)^2 = (\sqrt{40})^2 = 40$$

از آنجایی که سوال گفته D, C مجاورت دارند:

$$A, D \text{ مجاورت} \Rightarrow y_A + y_D = y_B + y_C$$

$$y + 1 = y + 7 \Rightarrow y = 6$$

$$A, C \text{ مجاورت} \quad C(\frac{7}{2}, y) \quad D(\frac{5}{2}, y + 1)$$

$$-t + x = 2 - x \quad x = \frac{2}{2} = 1$$

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

$$CD = \sqrt{(\frac{7}{2} - \frac{5}{2})^2 + (y - y - 1)^2} = 1$$

$$BC = \frac{5}{2}$$

$$2(AB + CD) = 10 \quad 2(5 + \frac{5}{2}) = 15$$

$$2mx + (m^2 - 1)y = 3 \quad \tan \theta = \sqrt{3}$$

$$\frac{-2m}{m^2 - 1} = \sqrt{3} \quad \sqrt{3}m^2 - \sqrt{3} = -2m$$

$$\sqrt{3}m^2 + 2m - \sqrt{3} = 0$$

$$\Delta: 4 + 12 = 16 \quad \frac{-2}{\sqrt{3}} = -\sqrt{3} \quad \frac{\sqrt{3}(\frac{2}{\sqrt{3}})}{\sqrt{3}} = \frac{2}{\sqrt{3}}$$

$$m = \frac{-2 \pm 4}{2\sqrt{3}} \quad \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$$

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

$$m_{BC} = \frac{11 - 3}{7 - 3} = \frac{8}{4} = 2$$

$$AH = \frac{|2 - 9 - 3|}{\sqrt{2^2 + (-1)^2}} = \frac{10}{\sqrt{5}} = 2\sqrt{5}$$

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

$$2x - y - 3 = 0$$

$$AB: y = -2x + 7$$

$$AC: y = \frac{3}{4}x + \frac{17}{4}$$

$$BC: y = \frac{1}{2}x - \frac{19}{2}$$

$$BH = \frac{|4 - 9 - 17|}{\sqrt{4^2 + 3^2}} = \frac{22}{5}$$

$$AC: y = \frac{3}{4}x - \frac{17}{4} = 0$$

$$\left(-\frac{14}{\varepsilon}, 0\right), (0, -4)$$