$\begin{vmatrix} -\frac{3}{4} & 0 \\ 0 & -6 \end{vmatrix} \rightarrow$  $m = \frac{\Delta y}{\Delta x} = \frac{-6}{\frac{3}{4}} = -8 \rightarrow y = -8x - 6$

نقطه روی نمودار = رأس مربع $\begin{vmatrix} \alpha & \\ \alpha & \end{vmatrix} \rightarrow \alpha = -8\alpha - 6 \rightarrow 9\alpha = -6 \rightarrow \alpha = -\frac{2}{3}$

فاصله دو نقطه = قطر $= \sqrt{\left(\frac{2}{3}\right)^2 + \left(\frac{2}{3}\right)^2} = \frac{2}{3}\sqrt{2}$

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$\frac{1}{a} = \frac{a}{1} \rightarrow a^2 = 1 \rightarrow a = \pm 1 \rightarrow y - x = 0$, $y - x = 1 \rightarrow d = \frac{|1|}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

$d = \frac{\sqrt{2}}{2}$

$\rightarrow z = \sqrt{2^2 - \frac{2}{4}} = \frac{\sqrt{98}}{2} \Rightarrow S = \frac{\sqrt{2}}{2} \times \frac{\sqrt{98}}{2} = \frac{7}{2} = 3/5$

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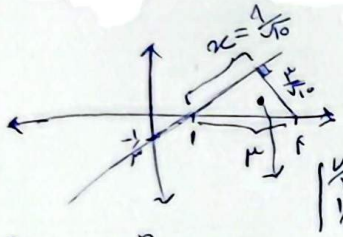
$AC = \frac{|4 - 1|}{\sqrt{10}} = \frac{3}{\sqrt{10}}$

۱



$x = \sqrt{9 - \frac{9}{10}} = \frac{9}{\sqrt{10}} \rightarrow S = \frac{\frac{9}{\sqrt{10}} \times \frac{3}{\sqrt{10}}}{2} = \frac{2/7}{2} = 1/35$

$\frac{1}{2}$ ✓

A مربع B $\frac{b-a}{-\frac{1}{3}+\frac{1}{2}} = \sqrt{3} \rightarrow b - a = \frac{1}{6}\sqrt{3} \rightarrow AB = \sqrt{\Delta x^2 + \Delta y^2} = \sqrt{\left(\frac{1}{2}+\frac{1}{3}\right)^2 + (b-a)^2}$

$= \sqrt{\left(\frac{1}{6}\right)^2 + \left(\frac{1}{6}\sqrt{3}\right)^2} = \frac{1}{6}\sqrt{4} = \frac{1}{3} \rightarrow$ ضلع $\rightarrow$ قطر $= \sqrt{\left(\frac{1}{3}\right)^2 + (1)^2} = 1/3\sqrt{2}$

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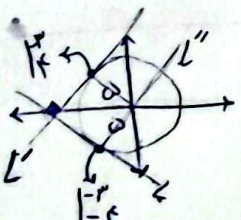

$m_{l''} = \frac{\Delta y}{\Delta x} = \frac{4}{3} \rightarrow m_{l''} = -\frac{1}{m_l} \rightarrow m_l = -\frac{3}{4} \xrightarrow{\text{جایگذاری}} -3 = \frac{9}{4} + b \rightarrow b = \frac{25}{4}$

$y_l = -\frac{3}{4}x + \frac{25}{4} \rightarrow m_{l'} = m_{l''} = \frac{4}{3} \xrightarrow{\text{جایگذاری}} 4 = -\frac{4}{3} + b \rightarrow y_{l'} = \frac{4}{3}x + \frac{16}{3}$

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

$\begin{cases} 4y + 3x = 25 \\ 3y - 4x = 12 \end{cases} \Rightarrow x = -\frac{21}{25}, \; y = \frac{172}{25} \rightsquigarrow xy = \frac{3612}{625} \simeq 5/77$

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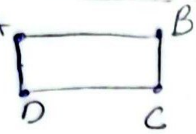
زهراسادات حسینی - پاسخنامه تشریحی تکلیف شماره ۱۷۰ . کلاس یازدهم دختر B

$m = \frac{\Delta y}{\Delta x} = \frac{m-k}{6} = -\frac{1}{2} \rightarrow m-k = -3 \rightarrow AB = \sqrt{\Delta x^2 + \Delta y^2} = \sqrt{6^2 + (m-k)^2}$

$= \sqrt{36+9} = \sqrt{45} \rightarrow S_{\text{مربع}} = a^2 = (\sqrt{45})^2 = \boxed{45}$



$B\,|\,{3 \atop 1} \quad x_A + x_C = x_B + x_D$

$-1 + x = 3 - 1 - x \rightarrow \boxed{x = \frac{3}{2}}$

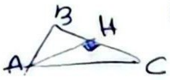
$AB = \sqrt{\Delta x^2 + \Delta y^2} = \sqrt{4^2 + 3^2} = \boxed{5} \rightarrow AB \perp BC \Rightarrow m_{AB} = \frac{\Delta y}{\Delta x} = \frac{3}{-4} \rightarrow m_{BC} = +\frac{4}{3} \xrightarrow[\text{جایگذاری}]{B|{3 \atop 1}}$

$1 = 4 + b \rightarrow b = -3,\ y = \frac{4}{3}x - 3 \xrightarrow{x = 3/2} y = \frac{4}{3} \times \frac{3}{2} - 3 = \boxed{-1 = y} \Rightarrow C\,|\,{3/2 \atop -1} \rightarrow BC = \sqrt{(3-\frac{3}{2})^2 + 2^2} = \boxed{\frac{5}{2}}$

$\text{محیط} = 2 \times 5 + 2 \times \frac{5}{2} = \boxed{15}$

$\tan 60^\circ = \sqrt{3} = \text{شیب} \Rightarrow \frac{-2m}{m^2-1} = \sqrt{3} \rightarrow \sqrt{3}m^2 - \sqrt{3} = -2m \rightarrow \sqrt{3}m^2 + 2m - \sqrt{3} = 0$

$\text{اختلاف مقادیر} = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{4+12}}{\sqrt{3}} = \boxed{\frac{4}{\sqrt{3}}}$



$BC \text{ معادله} \rightarrow m_{BC} = \frac{\Delta y}{\Delta x} = \frac{11-3}{7-3} = \frac{8}{4} = \boxed{2} \rightarrow 3 = 6 + b \rightarrow y = 2x - 3$

$b = -3 \qquad y - 2x + 3 = 0$

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

$BA = BC \Rightarrow \begin{cases} 2y + 4x = -4 \\ 3y - 7x = -19 \end{cases}$

$-11x = -33 \rightarrow \boxed{x = 3}, \quad \boxed{y = 1}$ مختصات B

$AC = 4y - 3x - 17 = 0$

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