

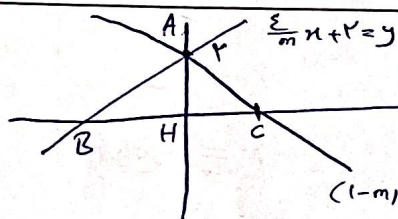
$A \in \text{line} \rightarrow 2x-1 = -\frac{1}{2}x + \frac{3}{2} \Rightarrow \dots$
 $C \in \text{line} \rightarrow 2x-1 = -x + \varepsilon \Rightarrow \dots$
 $B \in \text{line} \rightarrow -x + \varepsilon = -\frac{1}{2}x + \frac{3}{2} \Rightarrow \dots$
 $M \mid \frac{10}{\frac{1}{2}}$
 $AM = \sqrt{(\frac{1}{2})^2 + (\frac{3}{2})^2} = \frac{\sqrt{10}}{2}$
 $AH = \frac{|1 - (1) - (1) + \varepsilon|}{\sqrt{1+1}} = \sqrt{2}$

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$\sqrt{2} = \frac{|0 + 0 - c|}{\sqrt{(\frac{1}{2})^2 + b^2}} = \frac{|c|}{\frac{\sqrt{5}}{2}} \Rightarrow d = \frac{2|c|}{\sqrt{5}} = 2\sqrt{5} \Rightarrow$
 $2|c| = 10 \Rightarrow |c| = 5$

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$AB = \sqrt{c^2 + \varepsilon^2} = |c| \sqrt{5} = 5\sqrt{5}$



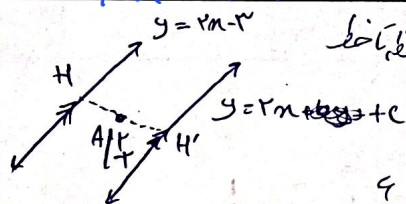
$AH = 2$ (ارتفاع از مبدأ شیب 2)
 محل برخورد خط

1, 2, 5

$C \mid \frac{x}{0} \Rightarrow (1-m)x = -2 \Rightarrow x = \frac{2}{m-1}$
 $B \mid \frac{x'}{0} \Rightarrow \frac{\varepsilon}{m}x = -2 \Rightarrow x = -\frac{2m}{\varepsilon}$
 $x - x' = \frac{\varepsilon + m^2 - m}{2m - 2}$

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$S = \frac{1}{2} \times 2 \times \frac{m^2 - m + \varepsilon}{2m - 2} = \frac{\omega}{2} \Rightarrow 2m^2 - 2m + 1 = 10m - 10 \Rightarrow (m-3)^2 = 0 \Rightarrow m = 3$
 $S_0 = \left| \frac{m^2 - m + \varepsilon}{2(m-1)} \right| \times 2 \times \frac{1}{2} = \frac{\omega}{2} \Rightarrow \frac{m^2 - m + \varepsilon}{m-1} = \pm 2 \Rightarrow m = 3, -1$

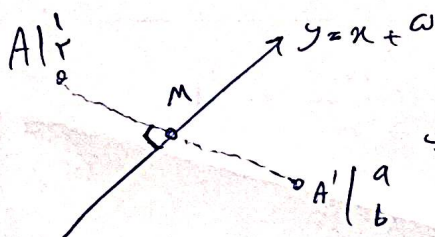


$AH = \frac{|2(2) - (-2) - 3|}{\sqrt{2+1}} = \frac{3}{\sqrt{3}} \Rightarrow HH' = 2 \times \frac{3}{\sqrt{3}} = \frac{6}{\sqrt{3}}$

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$\frac{6}{\sqrt{3}} = \frac{|c+c'|}{\sqrt{a^2+b^2}} \Rightarrow 9 = |1-2+c'| \Rightarrow c' = 9$

$12, 2 \Rightarrow \text{نسبت خط و شیب} = \sqrt{y' = 2m + 9}$



$(x, x+a)$

$M(\frac{1+a}{2}, \frac{2+b}{2}) \Rightarrow a + \frac{1+a}{2} = \frac{2+b}{2} \Rightarrow b = 9+a$

$AA' \perp \text{line} \Rightarrow m_{AA'} = -1 \Rightarrow \frac{2-b}{1-a} = -1 \Rightarrow 2-b = 1-a \Rightarrow a-b = -1$

$\Rightarrow \begin{cases} a = -3 \\ b = 9 \end{cases} \Rightarrow \begin{cases} 2b-a = 2(9)+3 = 21 \end{cases}$

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