

$$A \begin{vmatrix} 4 \\ -6 \end{vmatrix} \quad B \begin{vmatrix} 2 \\ 8 \end{vmatrix}$$

$$m = \frac{1 - (-4)}{1 - 1} = \frac{5}{0} = \infty$$

$$\text{نقطه وسط} = \begin{vmatrix} 3 \\ 1 \end{vmatrix}$$

$$y - y_1 = m(x - x_1)$$

$$\text{معادله خط} = y - 1 = +\frac{1}{1}(x - 3)$$

$$y = \frac{1}{1}x - \frac{3}{1} + 1$$

$$y = \frac{1}{1}x - \frac{2}{1}$$

$$\boxed{y = x - 2}$$

$$\text{میانگین} M: \left| \frac{\frac{1}{1} + \frac{1}{1}}{2} \right| = \left| \frac{2}{2} \right| = 1$$

$$CH \mid m_{CH} = +1 \rightarrow y = x - 2$$

$$AB \mid m_{AB} = \frac{-2}{1} = -2 \rightarrow y = -2x + 5$$

$$\text{نقطه برخورد} = H$$

$$y = x - 2$$

$$y = -2x + 5$$

$$MH = \sqrt{\left(\frac{1}{1}\right)^2 + \left(\frac{1}{1}\right)^2} = \sqrt{\frac{2}{1}} = \frac{\sqrt{2}}{1}$$

$$BC = \sqrt{14 + 9} = \sqrt{23} = \omega \quad \text{بازدهی - یا نه هم سرریز}$$

$$S_{ABC} = \frac{1}{2} \begin{vmatrix} 1 & 1 & 1 \\ -2 & 1 & 1 \\ -1 & 1 & 1 \end{vmatrix} = \frac{1}{2} \times 10 = 5$$

$$\frac{1}{2} \times BC \times AH = 5$$

$$\frac{1}{2} \times \omega \times AH = 5$$

$$\text{مساحت مثلث با قاعده BC}$$

$$AH = 2$$

$$\text{ارتفاع AH}$$

$$BC - AH = (2)$$

سوال دو

$$y = ax + b \quad 1) \quad y - ax = b \quad 2y - 2ax = 2b$$

$$2y - 2ax = 2b \quad 2) \quad 2y - 2ax = 2b \quad 2y - 2ax = 2b$$

$$m_1 = m_2 \quad \text{سواء} \quad \frac{+a}{1} = \frac{+1}{1} \quad \boxed{a=1}$$

$$2y - 2ax = 1$$

$$2y - 2ax = 1$$

$$d = \frac{|1 - 1|}{\sqrt{1 + 1}} = \frac{0}{\sqrt{2}} = 0$$

سوال سه

$$\text{مساحت} = \frac{1}{2} \times \text{قاعده} \times \text{ارتفاع}$$

$$S = \frac{1}{2} \times \omega \times \frac{1}{\omega} = \frac{1}{2}$$

$$(3m - 2)x + (\omega - m)y - 1 = 0 \quad a$$

$$(m + 1)x - (2m - 1)y + 1 = 0 \quad b$$

سوال د

نسبت هارمونی و قریب

$$m_a = \frac{-(3m - 2)}{\omega - m}$$

$$\frac{-(3m - 2)}{\omega - m} = \frac{-(2m - 1)}{(m + 1)}$$

$$m_b = \frac{-(m + 1)}{-(2m - 1)}$$

$$(3m - 2)(m + 1) = (\omega - m)(2m - 1)$$

$$3m^2 + 3m - 2m - 2 = \omega m - \omega - 2m^2 + 2m$$

$$\omega m^2 - 13m + 11 = 0$$

$$\Delta = 149 - 4(11)(\omega) = -191$$

معادله ایست که دارد و دو خط درجه دوم را هم بر هم می‌اندازد

$$\begin{cases} x + y = 1 \\ x + 2y = 3 \end{cases}$$

$$-y = 1 \quad y = -1, x = 0$$

$$B \begin{vmatrix} 0 \\ -1 \end{vmatrix}$$

$$\begin{cases} x + 2y = 3 \\ y - 2x = -1 \end{cases}$$

$$y = 1, x = 1$$

$$A \begin{vmatrix} 1 \\ 1 \end{vmatrix}$$

$$\begin{cases} x + y = 1 \\ y = 2x - 1 \end{cases}$$

$$x = \frac{\omega}{1}, y = \frac{1}{1}$$

$$C \begin{vmatrix} \frac{\omega}{1} \\ \frac{1}{1} \end{vmatrix}$$

$$M \begin{vmatrix} \frac{\omega}{1} \\ \frac{1}{1} \end{vmatrix}$$

$$\frac{AM}{AH} = \frac{\sqrt{\frac{\omega^2}{1} + \frac{1}{1}}}{\sqrt{1 + 1}} = \frac{\sqrt{\omega^2 + 1}}{\sqrt{2}} = \frac{\sqrt{2\omega}}{\sqrt{2}} = \omega$$

$$m_{BC} = \frac{\frac{10}{1}}{-\frac{10}{1}} = -1 \quad \text{میان ارتفاع است} \quad m_{AH} = +1$$

$$y = x \quad \text{نسبت هارمونی و قریب} \quad \begin{cases} y + x = 1 \\ y = x \end{cases}$$

$$2x = 1$$

$$\boxed{x = \frac{1}{2} \quad y = \frac{1}{2}}$$

میان

نویسنده: ...

اسم: ...

$$y + mx = x + y \quad y = 0 \quad mx = x + y$$

$$my - \epsilon x = ym \quad (m-1)x = y \quad x = \frac{y}{m-1}$$

$$y = 0 \quad x = -\frac{m}{y}$$

$$x = 0 \quad y = y$$

$$\begin{matrix} 0 \\ 1 \end{matrix}$$

$$S = \frac{1}{p} x |u_r - u_l| x y = \frac{\omega}{p}$$

$$\frac{y}{m-1} + \frac{m}{y} = \frac{\omega}{y} \quad \frac{\epsilon}{m-1} + m = \pm \omega$$

$m = y$
 $m = -y - \sqrt{\omega}$
 $m = -y + \sqrt{\omega}$

$$x = 0 \quad y = -y \quad (0, -y) \quad M(y, -y)$$

$$x = \epsilon \quad y = y(-y) - (-y) = -1 \Rightarrow (\epsilon, -1)$$

$$y+1 = y(x-y) \Rightarrow y = yx - y$$

اسم: ...

$$m = +1 \quad m' = -1$$

$$y - y = -(x-1) \Rightarrow y = -x + y$$

$$y + x = y$$

$$y = x + \omega$$

$$\frac{y - x = \omega}{y + x = y}$$

$$y = 1 = y = \epsilon \Rightarrow x = -1$$

$B(-1, \epsilon)$

اسم: ...

$$y x_B - x_A = x_A' \quad -y - 1 = -y$$

$$y y_B - y_B = y_B' \quad 1 - y = y$$

$$A' = \begin{pmatrix} -y & y \\ a & b \end{pmatrix} \quad y b - = y(y) - (-y) = 1\omega$$