

$$\frac{-b}{2a} = 1 \Rightarrow -b = 2a \Rightarrow -1 = 2(a-1) \Rightarrow -1 = 2a - 2 \Rightarrow 1 = 2a \Rightarrow a = \frac{1}{2}$$

$$y = -\frac{1}{2}x^2 + x + 1 \Rightarrow \Delta = 4 \rightarrow x_1 = \frac{-1 + \sqrt{4}}{-\frac{1}{2}} = \boxed{-2}$$

$$x_2 = \frac{-1 - \sqrt{4}}{-\frac{1}{2}} = \frac{-3}{-\frac{1}{2}} = \boxed{6} \leftarrow \text{جواب}$$

$$\boxed{x=6} \text{ و } \boxed{x=-2}$$

① $m < 0$ خارج درستی مطابق علامت است
 $a = m > 0$

② $\Delta > 0 \leftarrow \text{درستی داریم} \Rightarrow 4\omega - 2m^2 > 0 \Rightarrow \frac{2\omega}{2} > m^2 \Rightarrow \boxed{-\frac{\omega}{2} < m < \frac{\omega}{2}} \text{ ③}$

جواب ① و ③ $\Rightarrow \boxed{-\frac{\omega}{2} < m < \frac{\omega}{2}}$

$$ax^2 + bx + c \Rightarrow ax^2 - 5x + p \Rightarrow \boxed{ax^2 - 2x + \frac{2}{9} = y}$$

$$S = \frac{3 - \sqrt{5} + 3 + \sqrt{5}}{2} = \boxed{3}$$

$$P = \frac{(3 - \sqrt{5})(3 + \sqrt{5})}{9} = \boxed{\frac{2}{9}}$$

$$\alpha + \beta = 2 \Rightarrow \boxed{\beta = 2 - \alpha}$$

$$\alpha\beta = \frac{m+2}{2}$$

$$3\alpha^2 + (2 - \alpha)^2 = 12 \Rightarrow 3\alpha^2 - 4\alpha + 4 = 0 \Rightarrow \alpha^2 - 2\alpha + 1 = 0 \Rightarrow (\alpha - 1)^2 = 0 \Rightarrow \boxed{\alpha = 1}$$

$$\boxed{\beta = 1}$$

$$\frac{m+2}{2} = (1)(1) \Rightarrow 4 = m+2 \Rightarrow \boxed{m=2} \text{ جواب}$$

$$\frac{-b}{2a} = 1 \Rightarrow \boxed{2a + b = 0} \text{ ①}$$

$$\text{②, ①} \Rightarrow \boxed{a = -1} \quad \boxed{b = 2}$$

$$y = -x^2 + 2x + 5$$

$$S = \frac{4}{9} \Rightarrow 9 = 2a + 2b + \frac{a}{c} \Rightarrow \boxed{2 = 2a + 2b} \text{ ③}$$

$$-x^2 + 2x + 5 > 0 \Rightarrow \frac{-1 \quad 5}{-2 \quad 1} \Rightarrow \boxed{x \in (-1, 5)} \text{ جواب}$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta} = \frac{5}{\rho} = \frac{\frac{v}{\alpha}}{\frac{q}{\beta}} = \frac{\sqrt{v}}{q} \beta = \frac{v}{q} \times \frac{1}{\rho} = \frac{15}{2v} \text{ جواب}$$

① $\alpha^2 - v\alpha + q\beta = 0$ $\rightarrow \alpha(\alpha^2 - v\alpha - \frac{11}{\alpha^2}) = 0 \Rightarrow \alpha^2 - v\alpha - \frac{11}{\alpha^2} = 0$

② $\alpha\beta^2 + 11\beta = 0 \Rightarrow \beta(\alpha\beta + 11) = 0$
 $\alpha\beta = -11 \rightarrow \beta = -\frac{11}{\alpha} = -\frac{1}{\frac{1}{\alpha}} = -\frac{1}{\frac{1}{\rho}} = -\rho$
 $\Rightarrow \alpha^2 = t \Rightarrow t^2 - vt - 11 = 0$
 $t = -2 \times \frac{1}{\rho}$
 $t = 4 \Rightarrow \frac{1}{\alpha} = 4 \Rightarrow \alpha = \frac{1}{4}$

~~سوال 1/2~~

این سوال 1/2 هست جواب جانوسم؟

$\frac{-b}{2a} = -\frac{r}{m} \Rightarrow (\frac{\xi}{m^2})m - \frac{1}{m} + \frac{m}{r} + v = 1 \Rightarrow \frac{m^2 + \xi - 1}{2m} = 1 \Rightarrow m^2 - 2m - 1 = 0$

$(m - \xi)(m + 2) = 0$
 $m = +\xi$
 $\frac{1}{m} = -2$
 $m = -\frac{1}{2}$
 $y = -2x^2 + \xi x + 1$
 $x_1 = -1$
 $x_2 = 2 = k$
 جواب

$\beta^2 - 2m = -m\beta \Rightarrow \alpha^2 + \beta^2 - 2m = 1 \Rightarrow 5^2 - 2\rho - 2m = 1 \Rightarrow$

این سوال 1/2 هست!

$m^2 + 2m - 1 = 0 \rightarrow (m + \xi)(m - 2) = 0$
 $m = -\xi$ $m = 2$

$m = -\xi \rightarrow 0 = x^2 - \xi x + 1 \Rightarrow \Delta < 0$

$m = 2 \rightarrow x^2 + 2x - \xi = 0 \rightarrow \Delta > 0 \Rightarrow \xi = -2$ جواب

$\frac{-b}{2a} = 2 \Rightarrow \xi a + b = 0$ ①

$\frac{1}{4} \Rightarrow 4 = \xi a + 2b + \xi \Rightarrow \xi a + b = 1$ ②

① ② $\Rightarrow \begin{cases} a = -\frac{1}{\rho} \\ b = 2 \end{cases}$

$\frac{1}{2 - 2\sqrt{3}} + \frac{1}{2 + 2\sqrt{3}} = \frac{2 + 2\sqrt{3} + 2 - 2\sqrt{3}}{\xi - 12} = \frac{-1}{2}$ جواب

$y = -\frac{1}{\rho} x^2 + 2x + \xi$

$\Delta = \xi - \xi(-\frac{1}{\rho})(\xi) = 12$
 $x_1 = \frac{-2 + 2\sqrt{3}}{-1} = 2 - 2\sqrt{3}$
 $x_2 = \frac{-2 - 2\sqrt{3}}{-1} = 2 + 2\sqrt{3}$

$\xi - 2(a + \xi) + (2a^2 + 4a + 2) = 0 \Rightarrow 2a^2 - 2a - 1 = 0 \rightarrow a = 1$ جواب
 $a = -\frac{1}{\rho}$

$a = 1 \Rightarrow x^2 - 1x + 12 = (x - 4)(x - 3)$

جواب $x = 4$