

«ايراني و حيدري» (گروه A)

$$x=2 \rightarrow \frac{-b}{2a} = 2 \rightarrow \frac{-1}{2a-2} = 2 \rightarrow -1 = 4a-4 \rightarrow 3=4a \rightarrow a=\frac{3}{4}$$

$$-2(-\frac{1}{4}x^2 + x + 3 = 0) \rightarrow +x^2 - 4x - 12 = 0 \rightarrow (x-6)(x+2) \rightarrow x = \frac{6}{1} = 6$$

$$m > 0 \rightarrow \Delta > 0 \rightarrow 2a - 4(m^2) \rightarrow 2a - 4m^2 \rightarrow 2a > 4m^2 \rightarrow \frac{2a}{4} > m^2 \rightarrow \frac{a}{2} < m < +\frac{a}{2}$$

$0 < m < +\frac{a}{2}$ (بسیار)

$$\frac{m-\sqrt{a}}{m} + \frac{m+\sqrt{a}}{m} = \frac{6}{m} = 2 \rightarrow 5 \quad \frac{m-\sqrt{a}}{m} \times \frac{m+\sqrt{a}}{m} = \frac{9-a}{a} = \frac{9}{9} \rightarrow p$$

$$\frac{-b}{2a} \Rightarrow \frac{-2}{4a} \Rightarrow \frac{1}{a} = 1 \rightarrow a = 1$$

$$x = ax^2 + 2x + \frac{9}{a}$$

$$x = -x^2 + 2x + \frac{9}{a}$$

$$x^2 + 3^2 = 8^2 - 2x \rightarrow a^2 + b^2 = 14 - m - 2 \rightarrow 2a^2 + b^2 = 14 - m - \frac{4}{14} - m = 14$$

$$2a^2 - 4a + 2 = 0 \rightarrow 2a^2 - 14a + 14 + 14 = 0 \rightarrow 4a = m$$

$$(x-2)^2 \rightarrow x = \frac{2}{1} \rightarrow x = 1 \rightarrow m = 3$$

$$\frac{-b}{2a} = 2 \rightarrow -b = 4a \quad x = ax^2 + bx + c \rightarrow a = c$$

$$x = ax^2 + bx + a \rightarrow 9 = 5a + 2b + a = 9 \quad \left. \begin{matrix} b = 2, a = -1 \end{matrix} \right\}$$

$$(x+1)(x-1) \rightarrow x = -a, +1 \rightarrow x = +a, -1$$

برای اینکه در پایان محور جواب باشد.

$$\frac{a+b}{ab} \rightarrow \frac{\frac{v}{x}}{\frac{9b}{x}} \rightarrow \frac{v}{9b}$$

$$ab^2 = vb + 9b = 0 \quad a+b = \frac{v}{x}$$

$$-2b^2 + 2b = a$$

$$b(-2b+2) = 0$$

$$2 = 2b \rightarrow b = \frac{v}{m} \rightarrow 9b = 9$$

چونکه در این صورت جواب می باشد.

$$x^2 = -m\alpha + 2m - m\beta = 1 \rightarrow -\alpha + 2 - \beta = \frac{1}{m} \rightarrow -(\alpha + \beta) + 2 = \frac{1}{m} \rightarrow m + 2 = \frac{1}{m}$$

$$x + \beta = -2 \quad m = -\frac{2}{1} \rightarrow (m+2)(m-2) \rightarrow m^2 + 2m - 1 = 0$$

$$\frac{-\Delta}{4a} = -\left(14 - 2\left(\frac{m^2}{4} + vm\right)\right) = 1 \rightarrow -14 + 2m + 2vm = 14$$

$$2m^2 - 4m - 14 = 0$$

$$(m-1)(m+7) \rightarrow m = \frac{1}{2}$$

چونکه در این صورت جواب می باشد.

-9

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta}, \quad x = ax^2 + bx + c \rightarrow \frac{1}{x} = \frac{c}{x} + \frac{b}{1} + \frac{a}{x} \rightarrow 1 = ca + b, \quad \frac{-b}{2a} = \frac{1}{2} \rightarrow -b = ca \rightarrow b = 2, a = -\frac{1}{2}$$

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

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

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

-10

$$x^2 - 1x + 12 = 0 \rightarrow (x-4)(x-3) = 0 \rightarrow x = 4, 3$$

پس ریشه یعنی 4 و 3