

18, 17, 5

میتا فانی

SUBJECT

Year:

Month:

Day:

Page: ()

21 -1

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

$$\frac{-\Delta}{4a} = 9 \rightarrow 4ac - b^2 = 36a \rightarrow 4ac - 4a^2 = 36a \rightarrow c - a = 9$$

$$9a + 2b + c = 1 \rightarrow 9a + 4a + c = 1 \rightarrow 13a + c = 1$$

$$a - c = -9$$

$$13a = -1$$

$$a = -\frac{1}{13}$$

$$b = -1$$

$$c = \frac{10}{13}$$

$$y = -\frac{1}{13}x^2 - x + \frac{10}{13}$$

21 -2

$$\textcircled{1} \Delta > 0 \rightarrow m^2 - 4(2m + 12) > 0 \rightarrow m^2 - 8m - 48 > 0 \rightarrow (m - 12)(m + 4) > 0$$

$$\textcircled{2} \frac{c}{a} > 0 \rightarrow \frac{m+4}{2} > 0 \rightarrow m+4 > 0 \rightarrow m > -4$$

$$\textcircled{3} -\frac{b}{a} > 0 \rightarrow -\frac{m}{2} > 0 \rightarrow -m > 0 \rightarrow m < 0$$

$$(-\infty, -4) \cup (12, +\infty)$$

$$m \in (-4, -8) \leftarrow \text{از این مقدار به مجموع}$$

$$a + \beta = \frac{1}{a\beta}$$

$$\frac{x}{y}$$

$$\frac{-b}{a} = \frac{a}{c} \rightarrow -bc = a^2 \rightarrow -(2m-1)(2-m) = 9$$

21

$$2m^2 - 2m + 2 = 9 \rightarrow 2m^2 - 2m - 7 = 0$$

$$m^2 - m - \frac{7}{2} = 0$$

$$\frac{(m-4)(m+2)}{2} = 0$$

نمونه قیاس
در آن که جملات از هم جدا می شود

$$2m^2 - 2m - 7 = 0$$

$$a + \beta = 1$$

$$a\beta = -4$$

21

$$a^3 + \frac{1}{a} + a^3 + \frac{1}{\beta}$$

$$a^3 + \frac{1}{a} + a^3 + \frac{1}{\beta} \rightarrow a^3 + \frac{1}{a} + \frac{1}{\beta} \rightarrow S^3 - 3SP + \frac{S}{P} \Rightarrow 1 + 12 - \frac{1}{4} \rightarrow$$

$$a^3 + \frac{1}{a} + \frac{1}{\beta} \rightarrow a^3 + \frac{1}{a} + \frac{1}{\beta} \rightarrow -44 + 9 - \frac{1}{4} = -\frac{171}{4}$$

$$(a+\beta)^2 - 2a\beta$$

$$y = x^2 + \frac{19}{2}x - \frac{171}{4}$$

$$y = x^2 + \frac{19}{2}x - \frac{171}{4}$$



حل المسألة: $\sqrt[3]{u^4} + \left(\frac{1}{\sqrt[3]{u^2}} + 1 - 1\right) \sqrt[3]{u^2} - \left(\frac{1}{\sqrt[3]{u^2}} + 1\right) = 2\sqrt[3]{u}$

(2) - 5

$$\sqrt[3]{u^4} + 1 - \frac{1}{\sqrt[3]{u^2}} - 1 = 2\sqrt[3]{u}$$

$$u^{\frac{4}{3}} - \frac{1}{u^{\frac{2}{3}}} = 2u^{\frac{1}{3}} \rightarrow u^{\frac{4}{3}} - u^{-\frac{2}{3}} = 2u^{\frac{1}{3}}$$

$$u^{\frac{2}{3}}(u - u^{-1}) = 2u^{\frac{1}{3}} \Rightarrow u - \frac{1}{u} = 2$$

$$u^2 - 1 - 2u = 0$$

جمع نسبي $\rightarrow \frac{-b}{a} \rightarrow (2) \checkmark$

$$a = 3\beta$$

$$a\beta = \frac{1}{2} \rightarrow \beta(3\beta) = \frac{1}{2} \rightarrow 3\beta^2 = \frac{1}{2} \rightarrow \beta^2 = \frac{1}{6} \rightarrow \beta = \pm \frac{1}{\sqrt{6}}$$

$$a = \pm 2$$

(2)

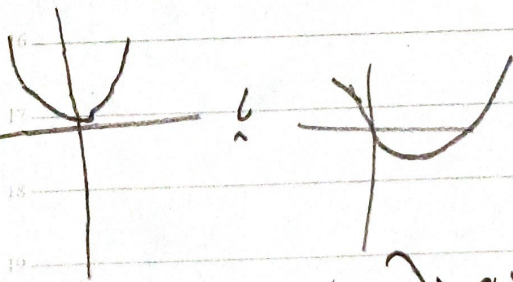
$$2 + \frac{2}{3} = \frac{1}{2}$$

$$-2 - \frac{2}{3} = -\frac{1}{2}$$

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

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

$$1 - (-1) = (2) \checkmark$$



✓ - 6 هيج مقدار

(2)

$$a > 0$$

$$b = 0$$

$$3 + 2a = 0$$

$$a = -\frac{3}{2}$$

$$-\frac{b}{a} > 0 \rightarrow \frac{-3 - 2a}{a} > 0$$

$$\frac{-3}{-1} > 0$$

$$\left[-\frac{3}{2}, 0\right) \cap (0, +\infty) \rightarrow \emptyset$$

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

$$ab = 2 \times 0 = 0$$

$$\frac{-a}{2} = -1 \rightarrow a = 2$$

$$1 = -x^2 - 2x - b \rightarrow x^2 + 2x + 1 - b = 0$$

$$\Delta = .$$

$$x = x + \epsilon b = .$$

$$b = .$$

$$2ax^2 + ax - 4 = 0$$

$$\rightarrow a, b \rightarrow a + b = \frac{-a}{2a} = -\frac{1}{2} \rightarrow ab = -3$$

$$2ax^2 - ax + b = 0$$

$$\rightarrow a + \frac{1}{2}, b + \frac{1}{2} \rightarrow a + \frac{1}{2} + b + \frac{1}{2} = \frac{a}{2}$$

$$-\frac{1}{2} + 1 = \frac{a}{2} \rightarrow a = 1$$

$$(a + \frac{1}{2})(b + \frac{1}{2}) = ab + \frac{a+b}{2} + \frac{1}{4} = \frac{b}{2}$$

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

$$\left[\frac{-4 \pm 1}{2} \right] = \left[\frac{-3}{2} \right] = (-2)$$

$$x^2 + 4x + m - x^2 - 2x + 3m = 0$$

$$x = -m$$

$$\text{نکته 2}$$

$$(-m)^2 + 4(-m) + m = 0$$

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

$$m^2 - 3m = 0$$

$$m(m - 3) = 0$$

$$\text{معادله اول} = x^2 + 4x + 4 = (x+2)(x+2)$$

$$\text{معادله دوم} = x^2 + 2x - 1 = (x+1)(x-1)$$

$$-d \text{ مشترک}$$

$$3 - (-1) = 4$$

$$\text{تفاوت مشترک}$$



$$-\frac{a}{r} = \frac{r}{-r} \rightarrow \boxed{a = r}$$

-Λ

$$1 = u^r + r u - r \rightarrow (u+r)(u-1) = 0 \rightarrow \begin{cases} u=1 \rightarrow A(1,1) \\ u=r \rightarrow B(-r,1) \end{cases}$$

$$\boxed{b = r} \leftarrow 1 = -9 + 4 + b \quad \checkmark$$

$$\boxed{ab = 1}$$