

$$y = a(x-h)^2 + k \quad \text{بسیار} \quad \begin{cases} h \rightarrow -1 \\ k \rightarrow 9 \end{cases}$$

$$\rightarrow \text{معادله} = y = a(x+1)^2 + 9$$

مثال (۱)  $\rightarrow 1 = a(1)^2 + 9 \rightarrow 1 = 14a + 9 \rightarrow a = -\frac{1}{4} \rightarrow y = -\frac{1}{4}(x+1)^2 + 9$

فاکتور

$$\Delta > 0 \quad m^2 - f(x)(m+4) = m^2 - 14m - 9 = (m-17)(m+5)$$

$$\delta > 0 \quad -\frac{b}{a} > 0 \Rightarrow -\frac{m}{4} > 0 \Rightarrow m < 0 \Rightarrow (-\infty, 0)$$

$$p > 0 \quad \frac{c}{a} > 0 \Rightarrow \frac{m+4}{4} > 0 \quad \frac{-4}{-1} \quad (-2, +\infty)$$

$$y = -\frac{x^2}{4} - x + \frac{17}{4}$$

$\begin{array}{c} -4 \quad 17 \\ + \quad -1 \quad + \\ \hline (-\infty, -5) \cup (1, +\infty) \end{array}$

$$\text{مجموعه جواب} \quad (-4, -1)$$

$$f = -\frac{b}{a}, p = \frac{c}{a} \quad -\frac{b}{a} = \frac{a}{c} \Rightarrow a^2 = -bc \Rightarrow 16 = (m-1)(m-2)$$

$$a = 2m^2 - 2m + 2$$

نشان دهیم که می توانیم ا-ا شود

$$\Rightarrow 2m^2 - 2m - 2 = 0 \Rightarrow m^2 - m - 1 = 0 \Rightarrow m = \frac{1 \pm \sqrt{5}}{2}$$

$0 < \Delta \quad r = \frac{1 \pm \sqrt{5}}{2} \leftarrow$  هر دو مقدار  $m$ ، استقل هستند تا بسیم نام جواب

$$x^2 - x - \epsilon = 0$$

$$x_1^2 + \frac{1}{x_1} \quad \text{و} \quad x_2^2 + \frac{1}{x_2} \quad \leftarrow \text{عادله}$$

ریشه ها:  $x_1, x_2$

$$f = x_1 + x_2 = -\frac{b}{a} = 1$$

$$f' = x_1^2 + x_2^2 + \frac{1}{x_1} + \frac{1}{x_2} = \frac{x_1^2 + x_2^2}{x_1 x_2} + \frac{x_1 + x_2}{x_1 x_2} = \frac{1 - \epsilon}{\epsilon} = \frac{1}{\epsilon}$$

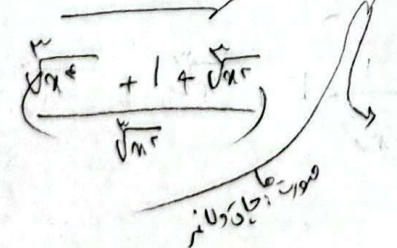
$$p = \frac{c}{a} = x_1 x_2 = -\epsilon$$

$$p' = (x_1^2 + \frac{1}{x_1})(x_2^2 + \frac{1}{x_2}) = \frac{x_1^2 x_2^2}{p} + \frac{x_1^2 + x_2^2}{p} + \frac{1}{x_1 x_2} + p$$

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

$$x^2 - \frac{1}{\epsilon} x + p' = x^2 - \frac{1}{\epsilon} x - \frac{2}{\epsilon} = 0 \Rightarrow \epsilon x^2 - x - 2 = 0$$

$$\left(\sqrt{x^2} + \frac{1}{\sqrt{x^2}} + 1\right)(\sqrt{x^2} - 1) = 2\sqrt{x^2} \Rightarrow x_1, x_2 \Rightarrow x_1 + x_2 = ?$$



$$\frac{x^2 - 1}{\sqrt{x^2}} = 2\sqrt{x^2} \Rightarrow x^2 - 1 = 2x \Rightarrow x^2 - 2x - 1 = 0$$

$\Delta = 4 + 4 = 8 > 0 \Rightarrow$  مختلف الیاء  $c, a, b$

$$f = -\frac{b}{a} = 1 = \boxed{1}$$

$$P = \frac{c}{a} \Rightarrow \frac{f}{r} = k_1 n_r \Rightarrow \frac{f}{r} = r n_r \Rightarrow n_r = \frac{f}{r} \Rightarrow n_1 = \frac{f}{r}$$

$$n_1 = r n_r$$

$$r \Rightarrow 1r - r a + c = 0 \Rightarrow a = 1$$

$$-r \Rightarrow 1r + r a + c = 0 \Rightarrow a = -1$$

$$1 - (-1) = \boxed{14}$$

min ab

دانشگاه  
که می وقت بود  
شهر

$$\Rightarrow a > 0 \text{ (1)}$$

$$\frac{-b}{a} > 0 \Rightarrow -\left(\frac{r+ra}{a}\right) > 0 \Rightarrow \frac{r+ra}{a} < 0$$

یکداز به مفاصفا صفر  
درگیری سبب است

$$y = x(ax + r + ra)$$

$$\frac{-\frac{r}{a}}{+\frac{r+ra}{a}}$$

$$\left(-\frac{r}{a} > 0\right) \text{ (2)}$$

بزرگ 1, 2 هیچ اشتراکی وجود ندارد  $\Rightarrow$  هیچ نقطه اری  
 $1 \cap 2 = \emptyset$

$$x = \frac{-b}{ra}$$

-1

$$y = n^r + a n - r \Rightarrow \frac{-b}{ra} = -\frac{a}{r} \Rightarrow -\frac{a}{r} = -1 \Rightarrow a = r$$

$$y = -n^r - r n + b \Rightarrow \frac{-b}{ra} = \frac{r}{-r} = -1$$

$$\Rightarrow y = n^r + r n - r \quad y=1 \Rightarrow n^r + r n - r = 0$$

$$y = -n^r - r n + b \quad y=1 \Rightarrow -n^r - r n + b - 1 = 0$$

$$-9 + 7 + b - 1 = 0 \Rightarrow b = 4$$

$$-1 - 5 + b - 1 = 0 \Rightarrow b = 7$$

$$\Rightarrow |ab| = 2 \times 4 = \boxed{8}$$

$$r x^2 - a x + b = 0$$

$$x_1, x_2 : \text{ریشه}$$

$$S = -\frac{b}{a} = x_1 + x_2 = \frac{r}{r} \Rightarrow P = \frac{c}{a} = x_1 x_2 = \frac{b}{r}$$

$$r a x^2 + a x - 4 = 0$$

$$x_1 = -\frac{1}{r}, x_2 = \frac{1}{r} : \text{ریشه}$$

$$S' = -\frac{b}{a} = x_1 + x_2 - 1 = \frac{1}{r} - 1 = -\frac{a}{ra}$$

$$+\frac{1}{r} - 1 = -\frac{1}{r} \Rightarrow a = 1$$

$$\left[\frac{ab}{c}\right] = ? \Rightarrow \left[-\frac{7 \times 1}{r}\right] = \left[\frac{r}{r}\right] = \boxed{-1}$$

$$n^r + r a + m = 0$$

$$x_1, x_2 : \text{ریشه}$$

-10

$$S = -\frac{b}{a}$$

$$S = x_1 + x_2 = -4 \Rightarrow |S - S'|$$

$$S = x_1 + x_2' = -2 \Rightarrow |S - S'| = |-4 - (-2)| = |-2| = \boxed{2}$$

$$|S - S'| = |x_1 + x_2' - x_1 - x_2| = |x_2' - x_2|$$

$$P' = \frac{c}{a} = \left(x_1 \cdot \frac{1}{r}\right) \left(x_2 - \frac{1}{r}\right) = x_1 x_2 + \frac{-x_1 + x_2}{r} + \frac{1}{r}$$

$$= \frac{b}{r} - \frac{a}{r} + \frac{1}{r} = -\frac{4}{ra}$$

$$\frac{r b - a + 1}{r} = -\frac{4}{ra}$$

$$a = 1 \Rightarrow \frac{r b - 1 + 1}{r} = -\frac{4}{r} \Rightarrow b = 4$$