

$$C.9 \left| \begin{array}{l} -\frac{b}{a} = -1 \\ \frac{c}{a} = 9 \end{array} \right. \Rightarrow \Delta = -144$$

$$\sqrt{\Delta} = 12$$

$$F_{a1}^r - F_{a1}^c = -144$$

$$F_{a1} - F_{c1} = -144$$

$$a - c = -9 \quad a = -9 + c$$

آشیا افین

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$$1 = 9a + 3b + c$$

$$(-9 + c)9 + 3(-14 + 2c) + c = 1$$

$$-81 + 9c - 42 + 6c + c = 1$$

$$14c - 123 = 1$$

$$14c = 124$$

$$c = 14$$

$$y = -\frac{1}{7}x^2 + 14x$$

$$F_{a1}^r + m + m + 9 = 0$$

$$\Delta > 0$$

$$m^2 - 4(m+9) > 0$$

$$-\frac{b}{a} = 5 > 0$$

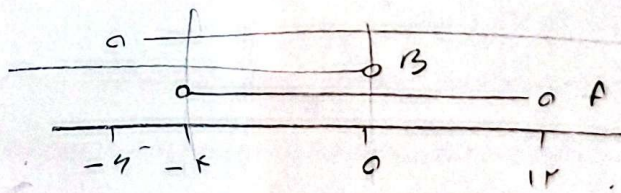
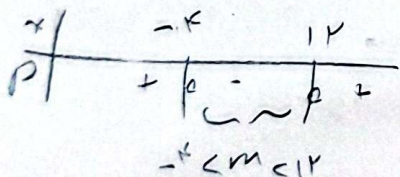
$$\frac{c}{a} = 9 > 0$$

$$m^2 - 4m - 36 > 0 \Rightarrow (m-12)(m+3) > 0$$

$$-\frac{m}{1} > 0 \Rightarrow -m > 0 \quad m < 0 \quad B$$

$$\frac{m+9}{1} > 0 \Rightarrow m+9 > 0 \quad m > -9 \quad C$$

$$-4 < m < 12$$



$$-4 < m < 0$$

$$r^2 x^2 + (r(m-1))x + r-m = 0$$

$$2 + 3 = 1 \Rightarrow \frac{-(r(m-1))}{r} = \frac{r}{r-m} \Rightarrow -r(m-1) + r-m = 9 \Rightarrow r(m-1) - 2m = 9$$

$$m = \frac{r}{r} = 1$$

$$m = \frac{r}{r} = 1$$

$$x^r - x - k = 0$$

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

$$x_1 + x_r = 1$$

$$p = \frac{c}{a} = -k$$

$$x_1 x_r = -k$$

$$S' = x_1^k + \frac{1}{x_r^k} + \frac{1}{x_1^k} + x_r^k$$

$$x_1^k + x_r^k + \frac{x_1 + x_r}{x_1 x_r} \cdot \frac{1}{k} \Rightarrow S^k - p(S) - \frac{1}{k} = \frac{1}{k} - \frac{1}{k} = \boxed{\frac{2}{k}}$$

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

$$b = -a$$

$$a = k$$

$$kx^r - ax - k = 0 \leftarrow \text{جواب}$$

$$p' = \left(x_1^k + \frac{1}{x_r^k}\right) \left(x_r^k + \frac{1}{x_1^k}\right) = p^k + x_1^r + x_r^r + \frac{1}{p}$$

$$-4k + \frac{5^k - 2p}{1+k} + \frac{1}{k} \Rightarrow \frac{-4k + 4}{-2k} - \frac{1}{k} = \boxed{\frac{-2k}{k}}$$

$$c = -2k$$

$$\left(\sqrt[k]{x^r} + \frac{1}{\sqrt[k]{x^r}} + 1\right) \left(\sqrt[k]{x^r} - 1\right) = r\sqrt[k]{x}$$

$$\left(\frac{\sqrt[k]{x^r} + 1 + \sqrt[k]{x^r}}{\sqrt[k]{x^r}}\right) \left(\sqrt[k]{x^r} - 1\right) = r\sqrt[k]{x}$$

$$x^r - 1 = rx \rightarrow x^r - rx - 1 = 0 \rightarrow x_1 + x_r = -\frac{b}{a} = \boxed{1}$$

$$rx^r - ax + k = 0$$

$$\Delta > 0$$



$$k < 5$$

$$k = \frac{a}{r} \rightarrow 12k = a$$

$$rx^r < p$$

$$rx^r = \frac{k}{p} \rightarrow 4x^r \in k$$

$$rx = \pm 1$$

$$a = 12 \left(\frac{k}{p}\right) - 12 \left(\frac{k}{p}\right) = \boxed{-\frac{r}{p} \cdot \frac{b}{p} + \frac{k}{p}}$$

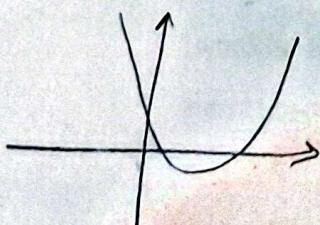
$$a = 12 \cdot \frac{b}{p} - 12 \cdot \frac{b}{p} = \boxed{12}$$

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

$$a < 0 \rightarrow$$

$$a > 0 \rightarrow$$

$$\Delta > 0 \rightarrow$$



$$x = -\frac{ra+k}{a} > 0 \rightarrow -\frac{k}{r} < a < 0$$

خی توانند زیرا با فرض صحت

فصل نمی بیند

ریشه هستند



صحت

$$\frac{r}{-1} = \frac{-a}{1} \rightarrow \boxed{a = r}$$

$$\text{لحل } y = x^r + r_m - r = 1 \rightarrow x^r + r_m - r = 0 \quad \left\{ \begin{array}{l} r = 1 \\ m = -r \end{array} \right.$$

$$y = -(m-1)(x+r) + 1 = -m - rx + r + 1 = -m - rx + r + 1$$

$$a + B = \alpha' + \beta' + 1 \rightarrow \frac{\alpha}{r} = \frac{-\alpha}{ra} + 1 = \frac{1}{r} \rightarrow \alpha = 1$$

$$\rightarrow rx + x - 1 = 0 \rightarrow \alpha' \quad \beta' = -r \quad \frac{r}{r} \rightarrow \alpha \quad \beta = -\frac{r}{r}, r$$

$$\rightarrow \frac{b}{r} = \alpha \beta = -r \rightarrow b = -r$$

$$\left[\frac{a \ b}{r} \right] = \left[\frac{-r}{r} \right] = -r$$

$$x^r + rx + m = 0 \quad \left\{ \begin{array}{l} a' \\ \beta' \end{array} \right. \rightarrow s' = \alpha + \beta' = -r \quad \left. \begin{array}{l} \beta' - \beta = \frac{10}{r} \end{array} \right\}$$

$$\left\{ \begin{array}{l} a \\ \beta \end{array} \right. \rightarrow s = \alpha + \beta = -r$$

$$\Delta > 0 \rightarrow m^2 - 4(r)(m+4) > 0 \rightarrow m^2 - 4m - 16 > 0$$

$$(m-12)(m+4) > 0 \rightarrow m > 12 \quad \text{و} \quad m < -4$$

$$S > 0 \rightarrow -\frac{m}{r} > 0 \rightarrow m < 0$$

$$P > 0 \rightarrow \frac{m+4}{r} > 0 \rightarrow m > -4$$

