

سؤال یک

$$\frac{1}{8} \frac{a}{B^2} + \frac{1}{8} B^3$$

$$5 = \text{جمع ریشه ها} = 2 = \text{ضرب ریشه ها}$$

$$a+B=2 \quad a \times B=5$$

$$\frac{1}{8} \times \frac{1}{B^3} + \frac{1}{8} B^3$$

$$a^2+B^2 \Rightarrow a^2+b^2+2ab=25 \Rightarrow a^2+b^2=21$$

$$\frac{1}{8} \left(\frac{a}{B^3} + B^3 \right) \rightarrow \frac{1}{8} \left(\frac{a}{B^3} + B^3 \right) (B^3-2 + \frac{a^2}{B^2}) \Rightarrow \frac{1}{8} (a+B)(a^2+B^2-2) = 19$$

سؤال دو

$$\text{طول رأس بی} = \frac{3-1.5}{2} = 0.75 = -\frac{b}{2a} \Rightarrow b = -1.5a$$

$$a+B \Rightarrow -\frac{b}{a} = -\frac{-1.5a}{a} = 1.5$$

$$\text{سؤال سه} \Rightarrow -2 = -\frac{2}{a} K \Rightarrow 4K^2-2 = \frac{19}{9} K \Rightarrow 4K^2-2 = \frac{19}{9} K \Rightarrow \sqrt{\frac{\Delta}{|a|}} = \sqrt{4K^2-2} = \frac{19}{9} K$$

$$K=9$$

$$\left[\frac{1}{4} \right] = \left[\frac{19.5}{4} \right] = [2.25] = 2$$

سؤال چهار

$$-\frac{5}{2} + \frac{3}{2} = -1 \rightarrow \text{طول رأس} \rightarrow a(m-h)^2 + K \rightarrow a(m+1)^2 + 1 = 0$$

$$+1 \rightarrow \text{عرض بی} \rightarrow x = -1 \pm \sqrt{\frac{-1}{a}}$$

$$\left(\frac{-1+1}{2} \right) \quad \left(\frac{-1-1}{2} \right)$$

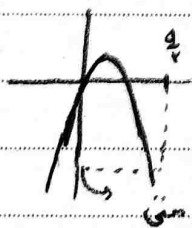
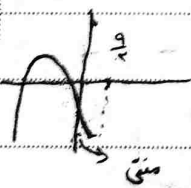
$$\left(-1 + \sqrt{-\frac{1}{a}} \right)^2 + \left(-1 - \sqrt{-\frac{1}{a}} \right)^2 \Rightarrow 1 - \frac{1}{a} + 1 - \frac{1}{a} = 5 \Rightarrow 2 - \frac{2}{a} = 5 \Rightarrow a = -\frac{2}{3}$$

$$-\frac{2}{3}(m+1)^2 + 1 \xrightarrow{x=0} -\frac{2}{3} + 1 \Rightarrow \left\{ \frac{1}{3} \right\} \rightarrow \text{عرض از مبدأ}$$

سؤال پنج

$$m_1 < m_2 < \frac{9}{2}$$

$$-m^2 + 5m + m = 0$$



نسبت 1 به 2
متنی می کنه

$$\Delta > 0 \rightarrow 25 + 4m > 0 \rightarrow m > -\frac{25}{4}$$

$$-\frac{11}{2} + \frac{25}{4} + m < 0 \rightarrow m < -\frac{9}{4}$$

$$-4.25 < m < -2.25 \rightarrow m = \left[-4/-5/-3 \right]$$

$$\frac{-\Delta}{fa} = r \rightarrow \frac{-(14r - fm(\delta m - 1))}{fm} = r$$

سوال ۱۶

$$\frac{-14r + r \cdot m^2 + fm}{fm} = r \rightarrow (-\frac{14}{m} + \delta m + 1 = r)m \rightarrow \delta m^2 - r^2 m - 14 = 0$$

$$0 = (\delta m - 14)(m + 1) \rightarrow (m - 14)(m + 1) = 0 \quad \left[\begin{array}{l} m = -\frac{14}{\delta} \\ m = \frac{14}{\delta} = 3 \end{array} \right]$$

$$\text{مقدار سیمی} = \frac{-b}{2a} = \frac{14}{2 \times 3} = r$$

$$\alpha \cdot \beta = a^r \quad \left\{ \begin{array}{l} a^r - ra + 1 = 0 \rightarrow (a-1)^2 = 0 \\ \frac{c}{a} \rightarrow \frac{ra-1}{1} = a^r \end{array} \right. \quad \boxed{a=1}$$

سوال ۱۷

$$\boxed{x^r = t} \rightarrow t^r - vt - \delta = 0 \rightarrow$$

سوال ۱۸

$$t = \frac{+v \pm \sqrt{v^2 + 4r}}{r} \rightarrow \frac{v \pm \sqrt{49}}{r} \rightarrow \boxed{\frac{v + \sqrt{49}}{r} = x^r}$$

$$x = \pm \sqrt{\frac{v + \sqrt{49}}{r}} \rightarrow \frac{v - \sqrt{49}}{r} = 0 \quad / \quad \frac{v - \sqrt{49}}{r} = -\frac{v - \sqrt{49}}{r}$$

$$+1(-\frac{v + \sqrt{49}}{r})^r \rightarrow \delta 9 + v\sqrt{49}$$

$$\frac{-b}{2a} = \frac{r}{2K} \quad \left\{ \begin{array}{l} \frac{-\Delta}{fa} = \frac{14 + rK}{-rK} = \frac{r + 4K}{-K} \end{array} \right.$$

$$\boxed{K = r}$$

$$-r = -rK$$

$$\frac{r + 4K}{-K} = \frac{-14}{rK} - r \Rightarrow \frac{r + 4K}{-K} = \frac{+14}{-K} - r \Rightarrow \frac{4K - r}{+K} = +r \rightarrow 4K - r = rK$$

$$-m\alpha^2 + m\alpha + 1 \neq -m - n$$

سوال ۱۹

$$-m\alpha^2 + (m+1)\alpha + 1 + m \neq 0 \rightarrow \Delta < 0$$

$$(m+1)^2 + 4m(1+m) < 0 \rightarrow m^2 + 2m + 1 + 4m^2 + 4m < 0 \rightarrow 5m^2 + 6m + 1 < 0$$

$$m^2 + 4m + 1 < 0 \rightarrow (\delta m + 1)(m + 1) < 0 \rightarrow \frac{1}{\delta} / -1$$

$$\begin{array}{c|c|c} -1 & +\frac{1}{\delta} & \\ \hline + & - & + \end{array} \rightarrow (-1, -\frac{1}{\delta}) \rightarrow \text{مقادیر مسموم}$$