

$$t^2 - \sqrt{t} - 5 = 0 \Rightarrow t = \frac{\sqrt{t} \pm \sqrt{t^2 + 20}}{2} = \frac{\sqrt{t} \pm \sqrt{69}}{2} \Rightarrow t_1 = \frac{\sqrt{t} + \sqrt{69}}{2} \quad \text{ارائه سوال 5}$$

$$\Rightarrow P^2 = \frac{1}{t} (t^2 + 20 + 16\sqrt{69}) = 59 + \sqrt{69} \Rightarrow 2P^2 - 2SP + 2S^2 = 59 + \sqrt{69} - 0 + 0$$

نام و نام خانوادگی: شماره: ۱۹ کلاس: از درجه: B

$$\beta = 3\alpha \Rightarrow \alpha + \beta = \frac{\alpha}{r} \Rightarrow \alpha = 3\alpha + 3\beta$$

$$\alpha \cdot \beta = \frac{c}{r} \Rightarrow 9(\alpha) = \frac{c}{r} \Rightarrow 3\alpha^2 = \frac{c}{r}$$

$$\alpha^2 = \frac{c}{9} \Rightarrow \begin{cases} \alpha = \frac{r}{3} \Rightarrow \beta = 2 \Rightarrow a = 1 \\ \alpha = -\frac{r}{3} \Rightarrow \beta = -2 \Rightarrow a = -1 \end{cases} \Rightarrow \text{اختلاف} = 16$$

$$36n^2 - (m+14)n + 1 = 0 \Rightarrow \sqrt{\frac{1}{\alpha}} + \sqrt{\frac{1}{\beta}} = 5 \quad (*)^2$$

$$\Rightarrow \frac{1}{\alpha} + \frac{1}{\beta} + 2\sqrt{\frac{1}{\alpha\beta}} = 25 \Rightarrow (m+14) + 2 \times 6 = 25$$

$$m+14 = 25 - 12$$

$$m = 1$$

$$S = \frac{m+14}{36}, P = \frac{1}{36} \Rightarrow mn^2 + 3n + 2 = 0 \Rightarrow P' = \frac{2}{m} = \frac{2}{-1} = -2$$

$$S = 1, P = -2 \Rightarrow n^2 - 5n + P = 0$$

$$n^2 - 5n - 2 = 0 \Rightarrow (n-2)(n+1) = 0 \Rightarrow n = -1, 2$$

ریشه ها در معادله درجه سوم باید صدق کند $n = -1$

$$-6 + k + 9 - 2 = 0 \Rightarrow k = -2$$

$$\alpha^2 + 2\alpha^2 + 2\beta^2 \quad P = a \quad S = -7$$

$$2(\alpha^2 + \beta^2) \quad \alpha^2 + \beta^2 = S^2 - 2P$$

$$9 + \frac{(9-a)}{18-a} + 6\sqrt{9-a} + \frac{2(36-2a)}{\sqrt{2-2a}} = 12\sqrt{2} + 185$$

$$\alpha = \frac{-7 - \sqrt{36-4a}}{2} \Rightarrow \alpha = \frac{-7 - 2\sqrt{9-a}}{2} \Rightarrow \alpha = -\frac{7}{2} - \sqrt{9-a}$$

$$\beta = -\frac{7}{2} + \sqrt{9-a}$$

$n = a$ ریشه در معادله درجه سه
 $n = -a$ هم ریشه در معادله

با توجه به ریشه در معادله درجه سه بودن ها

$$n^2 = t$$

$$t \geq 0$$

$$t^2 - \sqrt{t} + 5 = 0 \quad P' = -5 < 0$$

$$n^2 = t_1 > 0 \Rightarrow n_1, \bar{t} \pm \sqrt{t_1} \Rightarrow n_1 + n_2 = 0$$

$$n^2 = t_2 < 0 \Rightarrow n \notin \mathbb{R}$$

$$P = n_1 \cdot n_2 = \sqrt{t_1 \times (-t_1)} = P' = -t_1$$

(ارائه در بالا صفحه ۱)

(ارائه ۲)

$$9 - 5a + 6\sqrt{9-a} = 12\sqrt{2} + 185$$

$$5 - 5a + 6\sqrt{9-a} = 12\sqrt{2}$$

$$5 - 5a = 0 \Rightarrow a = 1$$

$$6\sqrt{9-a} = 12\sqrt{2}$$

$$9-a = 4 \Rightarrow a = 5$$

