

سوال ۱:

$$j = \frac{-\Delta}{\frac{1}{2}a} \Rightarrow \frac{-(b^2 + 12)}{-\frac{1}{2}} \geq 0 \Rightarrow b^2 + 12 = 12$$

$$b^2 = 0 \rightarrow b = 0$$

سوال ۲:

$$t = 2n^2 \rightarrow t^2 + 2t + 3 = 0$$

$$\Delta = b^2 - 4ac \rightarrow 4 - 12 < 0$$

ریشه ندارد $\Delta < 0$

سوال ۳:

$$t = 2n^2 \rightarrow t^2 - 2t - 1 = 0$$

$$(t - 1)(t + 1) = 0$$

$$t = 1 \rightarrow 2n^2 = 1 \rightarrow n^2 = \frac{1}{2} \rightarrow n = \pm \sqrt{\frac{1}{2}}$$

$$t = -1 \rightarrow 2n^2 = -1 \rightarrow n^2 = -\frac{1}{2} \rightarrow n = \pm \sqrt{-\frac{1}{2}}$$

سوال ۴:

$$5n^2 - 14n + m = 0$$

$$S = \frac{-b}{a} \rightarrow 2(\alpha + 1) = \frac{14}{5} \rightarrow \alpha = \frac{1}{5}$$

$$P = \frac{c}{a} \rightarrow \frac{m}{5} = 1 \rightarrow m = 5$$

ریشه $\alpha = \frac{1}{5}$

سوال ۵:

$$3n^2 - 4n + m - 1 = 0$$

$$2\alpha - \beta = 1 \rightarrow 2\alpha + 2\beta - 3\beta = 1$$

$$S = \frac{-b}{2a} = 2 \rightarrow \alpha + \beta = 2$$

$$2(\alpha + \beta) - 3\beta = 1$$

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

$$P = \frac{c}{a} = \alpha\beta \rightarrow \frac{m-1}{3} = \alpha\beta \rightarrow m-1 = 3\alpha\beta$$

$$\alpha + \beta = 2 \rightarrow \frac{1}{3} + \alpha = 2 \rightarrow \alpha = \frac{5}{3}$$

$$m - 1 = 0 \rightarrow m = 1$$

سوال ۶:

$$P = 1 \rightarrow \frac{c}{a} = 1 \rightarrow \frac{m^2 - 1}{-m} = 1 \rightarrow m^2 + m - 1 = 0$$

$$(m + 1)(m - 1) = 0$$

$$m = 1 \rightarrow n^2 + 1 = 0 \rightarrow n^2 = -1 \rightarrow n = \pm i$$

$$m = -1 \rightarrow n^2 + 2n + 1 = 0 \rightarrow (n + 1)^2 = 0 \rightarrow n = -1$$

31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 09 | 08 | 07 | 06 | 05 | 04 | 03 | 02 | 01

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