

$$P = a \cdot b = \frac{c}{a} = 2$$

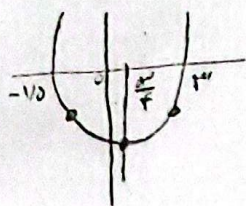
$$S = -\frac{b}{a} = 5$$

$$\frac{(a+b)^2 a + b^3}{5b^2} = \frac{a^3 + b^3}{5} = \frac{S^3 - 3PS}{5} =$$

$$\frac{125 - 30}{5} = 20 - 6 = 14 \checkmark$$

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$$x_{\text{راس}} = -\frac{b}{2a} = \frac{3}{4} \Rightarrow -\frac{b}{a} = 1/5$$

$$S = -\frac{b}{a} = 1/5 \checkmark \rightarrow \text{جمع } x \text{ های که حاصل می کند}$$

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$$\frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{4k^2 - 20}}{1} = \frac{4}{3}k \Rightarrow 4k^2 - 20 = \frac{16}{9}k^2 \quad \frac{20}{9}k^2 = 20$$

$$k^2 = 9 \quad \left[\frac{k^2}{2} \right] = \left[\frac{9}{2} \right] = 4 \checkmark$$

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$$x_{\text{معدن}} = \frac{3 + (-5)}{2} = -1 = x_{\text{راس}} \quad -\frac{b}{2a} = -1 \Rightarrow 2a = b \Rightarrow -\frac{b}{a} = -2$$

$$a^2 + b^2 = S^2 - 2P = \left(-\frac{b}{a}\right)^2 - \frac{2c}{a} = 5 \Rightarrow \frac{2c}{a} = -1 \quad \frac{c}{a} = -\frac{1}{2} \Rightarrow a = -2c$$

$$y_{\text{راس}} = -\frac{\Delta}{4a} = -\frac{b^2 - 4ac}{4a} = -\frac{4a^2 - 4ac}{4a} = -a + c = 1 \Rightarrow c = \frac{1}{3}$$

$$c = \frac{1}{3} \quad \text{نقطه} \left[\frac{0}{1} \right]$$

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$$x_1 + x_2 = -\frac{b}{a} = 5 \quad x_2 = 5 - x_1$$

$$x_1 < \frac{9}{2} \Rightarrow -x_1 > -\frac{9}{2} \Rightarrow 5 - x_1 > 5 - \frac{9}{2} \Rightarrow x_2 > \frac{1}{2}$$

$$\frac{1}{2} < x_1, x_2 < \frac{9}{2}$$

$$\frac{1}{2} < P < \frac{11}{2} \Rightarrow -\frac{1}{2} > m > -\frac{11}{2}$$

$$\text{از } 1 - 20c = 20 \text{ صحیح}$$

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$$y=2 = \frac{144 - 2m(2m-1)}{2m} \Rightarrow -1m = 144 - 20m^2 + 2m$$

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$$20m^2 - 12m - 144 = 0 \Rightarrow 5m^2 - 3m - 36 = 0 \quad \Delta = 9 + 720 = 729$$

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$$m = \frac{3 \pm \sqrt{729}}{10} \rightarrow 3 \quad \frac{b}{2a} = \frac{12}{40} = \frac{3}{10} \quad \boxed{m=2} \quad \text{تابع کالیس دارای شیب}$$

$$\alpha \times \beta = \frac{2a-1}{1} = a^2 \Rightarrow a^2 - 2a + 1 = 0 \Rightarrow \boxed{a=1} \quad \checkmark$$

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$$\Delta > 0 \quad 14 - 4 > 0 \quad \checkmark$$

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$$x^2 = t \quad t^2 - vt - d = 0 \quad \checkmark \quad t_1 + t_2 = \dots \quad t_1 \times t_2 = -d$$

(5/5)

$$\begin{aligned} x_1 + x_2 &= 0 \\ x_1 \times x_2 &= -t_1 \\ x_2 + x_4 &= 0 \\ x_2 \times x_4 &= -t_2 \end{aligned}$$

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$$S = \underbrace{x_1 + x_2} + \underbrace{x_2 + x_4} = 0 \quad \checkmark \quad 2P^2 - 25P + 25 = 0$$

$$P = -\sqrt{t_1} \times \sqrt{t_1} \times -\sqrt{t_2} \times \sqrt{t_2} = (-t_1) \times (-t_2) = \dots$$

$$\begin{cases} x = \frac{-b}{2a} = \frac{5}{2k} = \frac{5}{k} \\ y = \frac{5}{k} + \frac{1}{k} - 4 = \frac{6}{k} - 4 \end{cases}$$

$$y = \frac{6}{2} - \frac{1}{2} - 4 = \boxed{-1} \quad \checkmark$$

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$$\frac{6}{k} - 4 = -1 \left(\frac{6}{k} \right) - 1 \Rightarrow \frac{6}{k} = 2 \Rightarrow k = 2$$

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$$-m^2 + m + 1 \neq -m - 2 \Rightarrow m^2 - (m+1)2 - (m+1) \neq 0 \Rightarrow$$

$$(m+1)^2 + 5m(m+1) < 0 \quad (m+1)(m+1+5m) < 0$$

$$\frac{-1}{+ \phi} - \frac{1}{- \phi} +$$

م. حایک که برضه نمی کنند $\rightarrow (-1, -\frac{1}{5})$ برای هر عدد صحیح m این دو برضه می کنند.

$$n = \frac{-b \pm \sqrt{\Delta}}{2a} \rightarrow \frac{-2 \pm \sqrt{4a + 4m}}{-2} < \frac{a}{r} \rightarrow \pm \sqrt{4a + 4m} < 4 \quad -\Delta$$

$$0 \leq 4a + 4m < 16 \rightarrow -4, 4a \leq m < -2, 4a \rightarrow m \in \{-3, -1, -2, -4\}$$

me 4

$$n' = t \rightarrow t' - vt - a = 0 \rightarrow t = \frac{v \pm \sqrt{4a}}{r} \rightarrow n' = \frac{v + \sqrt{4a}}{r} \quad -\Delta$$

$$n = \pm \sqrt{\frac{v + \sqrt{4a}}{r}} \rightarrow S = 0 \quad P = -\frac{v + \sqrt{4a}}{r}$$

$$rp' - rSp + rS = \boxed{a + v\sqrt{4a}}$$