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$$\frac{-1}{2a-2} = 2 \quad f_a - f_c = -1 \quad f_a \cdot f_c = \frac{1}{f} \quad (a-1)x^2 + ax + 1 = 0 \quad \frac{-a}{2} \rightarrow x_1 + x_2$$

$$\Delta = 1 - 4\left(\frac{1}{f}\right)(1) = 4$$

$$x = \frac{-1 \pm \sqrt{4}}{\frac{1}{f}} = \textcircled{f} \text{ و } \textcircled{-f}$$

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$m < 0$ ، $\Delta > 0$

$f(a - f(m))(m) > 0$

$\frac{2a}{f} > m^2 \quad \frac{a}{f} > m > \frac{a}{f} \cup m < 0 \rightarrow m \in \left(\frac{a}{f}, 0\right) \checkmark$

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$x^2 - 5x + 6 > 0$

$S = \frac{a - \sqrt{\Delta}}{2} \rightarrow \frac{5 - \sqrt{1}}{2} = 2$

$P = 1 - \frac{a}{q} + \frac{r}{q}$

$x^2 - 2x + \frac{4}{9} \checkmark$

$9x^2 - 18x + 4 = 0$

سوال گفته باضرب صحیح!

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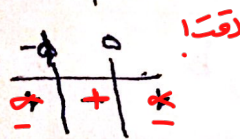
$S(x, y)$

$ax^2 + by^2 + c = 0$

$\frac{-b}{2a} = 2$

$fa + 2b + ca = 9 \quad b = 4$

$x^2 > f(x + a) \rightarrow x^2 > -1$



$x \in \left(\frac{a}{f}, 0\right) \cup \left(0, \frac{a}{f}\right)$
 $(-1, 5)$

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سوال ۱۰

$2a^2 + 2b^2 + a^2 - b^2 = 12$

سوال ۱۰

$S - 2P) - 5(2a^2 + a^2 + 2b^2 - b^2 = 12 \rightarrow 2(a^2 + b^2) + a^2 - b^2 = 12$

$\frac{B > a}{a - b < 0} \rightarrow 2(5^2 - 2P) + (5)\left(\frac{-\sqrt{\Delta}}{2a}\right) = 12$

$\frac{S = 4}{P = \frac{m+2}{2}} \rightarrow 2(14 - m - 2) - 4\left(\frac{\sqrt{48 - 4m}}{2}\right) = 12 - 2m - 2\sqrt{48 - 4m} = 12$

$14 - 2m = 2\sqrt{48 - 4m} \rightarrow m = 4$

$$\frac{1}{a} + \frac{1}{b} \quad a\alpha^2 - v\alpha + 9\beta = 0$$

$$\frac{-1}{c} \rightarrow \frac{a}{14} = \frac{-14+9}{f\Lambda} = \frac{-v}{f\Lambda}$$

(2, Δ)

$$\frac{9\beta}{a} = a\beta \quad a\beta^2 = 9\beta \quad a = \pm 9 \checkmark \quad S = \alpha + \beta = \frac{v}{a} \rightarrow \begin{cases} \alpha = 3 & \beta = -\frac{1}{3} \times \\ \alpha = -3 & \beta = \frac{1}{3} \checkmark \end{cases}$$

$$\frac{-v}{a} = \alpha + \beta \quad a^2 \alpha \beta = -v$$

$$9 \times 9\beta = -v$$

✓ $\beta > 0$
 $a = \pm 9$

$$9 \times 9\beta = -14$$

$$\frac{1}{a} + \frac{1}{b} = \frac{-1}{f} + \frac{v}{f} = \frac{v}{f}$$

$$\alpha^2 + m\alpha - fm = 0 \rightarrow \alpha^2 = fm - m\alpha$$

$$fm - m\alpha - m\beta = \Lambda \rightarrow fm - m(\alpha + \beta) = \Lambda \rightarrow fm + m^2 = \Lambda$$

$$\rightarrow \begin{cases} m = -f \rightarrow \Delta < 0 \times \\ m = f \rightarrow \Delta > 0 \checkmark \rightarrow S = -m = (-f) \end{cases}$$

سهمی رو به پایین است یعنی $m < 0$

$$y_{\max} = \frac{-\Delta}{fa} = \frac{-(14 - fm(\frac{m}{f} + v))}{fm} = \Lambda \rightarrow \begin{cases} m = f \times \\ m = -f \checkmark \end{cases}$$

$$f_{\min} = -fn^2 + fn + 4 = 0 \rightarrow \begin{cases} n = -1 \\ n = 2 \checkmark \end{cases}$$

$$c = f \quad \frac{-b}{fa} = f \quad -fa = b \quad fa + fb + f = \gamma \quad b = f \quad a = -\frac{1}{f}$$

$$\frac{-a}{f} + fa + f = 0 \quad \frac{1}{a} + \frac{1}{b} = \frac{a+b}{ab} = \frac{f}{-f} = -\frac{1}{f} \checkmark$$

$$\beta = \frac{f}{-1} = -1$$

$$S = \frac{-f}{-1} = f$$

$$f - \Lambda a - \Lambda + c\alpha^2 + 9a + c = 0$$

$$c\alpha^2 - \Lambda a - 1 = 0$$

$$a = \frac{f \pm \sqrt{f^2 - 4}}{4} = \frac{-1}{2} \text{ و } 1$$

$$a = 1 \rightarrow \alpha^2 - \Lambda a + 5 = 0 \quad \alpha = \frac{\Lambda \pm \sqrt{\Lambda^2 - 20}}{2} = 1, 4 \checkmark$$

$$a = -\frac{1}{2} \rightarrow \alpha^2 - \frac{\Lambda}{2}\alpha + \frac{f}{2} = 0 \quad \alpha = \frac{\frac{\Lambda}{2} \pm \sqrt{\frac{\Lambda^2}{4} - \frac{14}{2}}}{2} = \frac{1}{2} \text{ و } 2 \checkmark$$