

۱۱,۷۵

نام و نام خانوادگی: کلاس: ۱۳ پاسنامه تشریحی تکلیف شماره: ۱۳ B

$$\frac{b}{2a} = 2 \Rightarrow \frac{-1}{2(a-1)} = 2 \Rightarrow 2a - 1 = -1 \Rightarrow a = \frac{1}{2}$$

$$\Rightarrow \Delta = 1 - 4 \times \left(-\frac{1}{2}\right) \times 3 = 1 \Rightarrow \frac{-1 \pm \sqrt{1}}{2 \times \frac{1}{2}} = \frac{-1 \pm 1}{1} = 0 \text{ or } -2$$

$$\Rightarrow y = -\frac{1}{2}x^2 + x + 3$$

$$\Rightarrow y = -x^2 + 2x + 12 = 0 \Rightarrow x = 4 \text{ or } -2$$

$m < 0$ $\Delta > 0 \Rightarrow 2\Delta - 4m^2 \geq 0 \Rightarrow m = -2, 2$

$m \in (-2, 2) \Rightarrow m \in (-\frac{\Delta}{2}, 0)$

$$x^2 - 5x + 6 \Rightarrow (x^2 - 2x + \frac{4}{9})x^2 = x^2 - 2x + \frac{4}{9}$$

$$x^2 \Rightarrow 9x^2 - 18x + 4$$

$$\alpha^2 + \beta^2 = 12 - 2x^2$$

$$\Rightarrow f\alpha - \frac{m+2}{2} \Rightarrow f\beta - \frac{m+2}{2} \Rightarrow f\alpha + f\beta + m - 2 = 12 - 2x^2$$

$$\Rightarrow 12 - m - 2 = 12 - 2x^2 \Rightarrow 2x^2 - 2 + m = 0 \Rightarrow x^2 = \frac{2-m}{2}$$

$$f - \frac{2-m}{2} = \frac{m+2}{2} = \beta^2 \Rightarrow x^2\beta^2 = \frac{-m^2 - 4m + 12}{4} = \frac{(m+2)^2}{4} \Rightarrow m = -2$$

$y_{ext} > 0 \Rightarrow \max \Rightarrow y = \frac{-(m-2)^2 + 9}{4} \times a$

$\Rightarrow y = \frac{(-m^2 + 4m + 4)}{4} \times a \Rightarrow c = d \Rightarrow a = 1$

$m = \frac{-4 \pm \sqrt{16}}{-2} = -1 \text{ or } 3$

$\Rightarrow \text{if } a \in (-1, 3) \Rightarrow y > 0$

$$\frac{V}{\alpha} = \alpha + \beta, \quad \frac{9\beta}{\alpha} = \frac{\alpha}{1} \Rightarrow \alpha^2\beta - 9\beta = 0$$

$$\alpha^2 + \alpha\beta - V = 0 \quad \Rightarrow \beta(\alpha^2 - 9) = 0$$

$$\alpha \neq 0 \Rightarrow \alpha = \pm 3$$

$$\alpha = 3 \Rightarrow 9 + 3\beta - V = 0 \Rightarrow \beta = \frac{V-9}{3}$$

$$\alpha = -3 \Rightarrow 9 - 3\beta - V = 0 \Rightarrow \beta = \frac{9-V}{3}$$

$$\Rightarrow \frac{1}{\alpha} + \frac{1}{\beta} = \frac{-1}{3} + \frac{1}{3} = \frac{V}{9} \checkmark$$

(2)

$$x = \frac{-m \pm \sqrt{m^2 + \epsilon m}}{r} \Rightarrow \frac{m^2 + m^2 + \epsilon m - 2m\sqrt{m^2 + \epsilon m}}{r} = \frac{-m^2 - m\sqrt{m^2 + \epsilon m}}{r}$$

$$= \frac{\Delta m}{\epsilon} = 2m = 1 \Rightarrow \cancel{m=1/2}$$

$$\Rightarrow \frac{-b}{a} = \frac{-r}{1} = \cancel{r} = \alpha + \beta$$

$$\frac{14 - 2m^2 - 2\epsilon m}{- \epsilon m} = 1 \Rightarrow 2m^2 - \epsilon m - 14 = 0$$

$$m = -1 \Rightarrow 14 - 2 + 2\epsilon > 0 \checkmark$$

$$m = 0 \Rightarrow 14 - 0 - 14 = 0 \times$$

$$\Rightarrow m = -1 \Rightarrow -2^2 + \epsilon m + \frac{1}{r} = 0 \Rightarrow \Delta = 14 + 2\epsilon = \epsilon \epsilon \Rightarrow \frac{\epsilon \pm \sqrt{\epsilon \epsilon}}{-2} = \frac{\epsilon \pm \sqrt{\epsilon \epsilon}}{-2}$$

(1)

$$\frac{-\Delta}{\epsilon a} = 1 \quad \frac{-b}{\epsilon a} = 1 \quad c = r$$

$$\Rightarrow b = -\epsilon a \Rightarrow \Delta = 14a^2 - 14a \Rightarrow \frac{-\Delta}{\epsilon a} = \frac{\epsilon a - r}{9}$$

$$\checkmark \epsilon a - r = -4 \Rightarrow a = \cancel{1/2} \Rightarrow -\frac{b}{r} \alpha^2 + 1 - \alpha + r = 9$$

$$\Rightarrow \alpha, \beta = \frac{-1 \pm \sqrt{14}}{-2} = \frac{1 \pm \sqrt{14}}{2} \Rightarrow \frac{1}{1 + \sqrt{14}} + \frac{1}{1 - \sqrt{14}} = \frac{-1}{r}$$

(1/2)

$$f - 14a - 1 + 2a^2 + \epsilon a + r = 2a^2 - 2a - 1 = 0$$

$$\Rightarrow \Delta = 4 + 12 \Rightarrow a = \frac{1 \pm \sqrt{16}}{2} = 1$$

$$x^2 - 14x + 14 = 0 \quad (x-2)(x-4) = 0 \Rightarrow x_1 = 2, x_2 = 4$$

$$x^2 - 14x + \frac{14}{r} = 0 \Rightarrow x = \frac{14 \pm \sqrt{14}}{r}$$

(2)

$$f(x) = -2x^2 + \epsilon x + 4 = 0 \rightarrow \begin{cases} x = -1 \\ x = 4 \end{cases} \checkmark$$

ادامہ سوال ۱

کسب است! ۱

$$r\alpha^r + \alpha^r + r\beta^r - \beta^r = 1r \rightarrow r(\alpha^r + \beta^r) + \alpha^r - \beta^r = 1r$$

(f)

$$\frac{\beta > \alpha}{\alpha - \beta < 0} \rightarrow r(S^r - r\rho) + (S)\left(\frac{-\sqrt{\Delta}}{|\alpha|}\right) = 1r$$

$$\frac{S = r}{\rho = \frac{m+r}{r}} \rightarrow r(14 - m - r) - r\left(\frac{\sqrt{r\Lambda - \Lambda m}}{r}\right) = r\Lambda - rm - \sqrt{r\Lambda - \Lambda m} = 1r$$

$$14 - rm = \sqrt{r\Lambda - \Lambda m} \rightarrow \boxed{m = r}$$

$$\alpha^r + m\alpha - rm = 0 \rightarrow \alpha^r = rm - m\alpha$$

(v)

$$rm - m\alpha - m\beta = \Lambda \rightarrow rm - m(\alpha + \beta) = \Lambda \rightarrow rm + m^r = \Lambda$$

$$\rightarrow \begin{cases} m = -r \rightarrow \Delta < 0 \quad \times \\ m = r \rightarrow \Delta > 0 \quad \checkmark \rightarrow S = -m = \boxed{-r} \end{cases}$$

$$y = \frac{-1}{r}(n-r)^r + 4 = n^r - rn - \Lambda$$

اطرفه سوال 9

$$\text{حواسته سوال : } \frac{1}{\alpha} + \frac{1}{\beta} = \frac{S}{\rho} = \boxed{\frac{-1}{r}}$$