

۱۹، ۷۵

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۲۲ ... کلاس: شیخا بیان

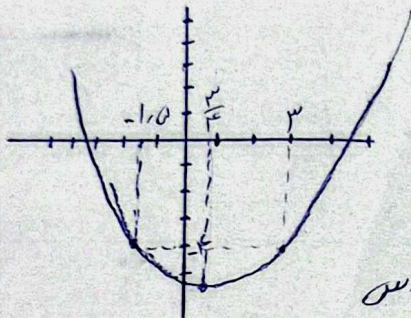
$$x^2 - 2x + 2 = 0 \Rightarrow x^2 = 2x - 2$$

$$x^4 + 2 = x^2(2x - 2) + 2 = 2x^3 - 2x^2 + 2$$

$$x^4 = x^2 \times x^2 = x^2(2x - 2) = 2x^3 - 2x^2$$

$$x^4 = x^2 \times x^2 = (2x - 2)^2 = 4x^2 - 4x + 4 = 1.0x^2 - 4x + 4$$

$$x^4 - 4x^2 + 4 = 0 \Rightarrow x^2 = 2x - 2 \Rightarrow 19(2x - 2) \mid \frac{95(2x - 2)}{2x - 2} = \frac{(2x - 2) \times 19}{2x - 2} = 19$$



$$\frac{3 + (-1/2)}{2} = \frac{5}{4}$$

$$s = \frac{-b}{a} = \left[\frac{5}{4} \right]$$

$$x = \frac{5}{4} = \frac{-b}{2a} \Rightarrow -\frac{b}{a} = \frac{5}{2}$$

$$x^2 + 2 \leq x + 0 = 0 \Rightarrow \Delta x = \frac{4}{9} < 0$$

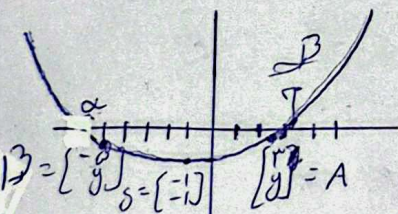
$$x - 3 = \sqrt{(x+3)^2 - 4x} = \sqrt{(x-2)^2 - 4x} = \sqrt{4x^2 - 4x - 4}$$

$$\sqrt{4x^2 - 4x - 4} = \frac{4}{3} < 0$$

$$4x^2 - 4x - 4 = \frac{16}{9} < 0$$

$$\frac{4x^2 - 4x - 4}{4} = \frac{1}{9} < 0$$

$$x^2 = \frac{1}{9} \Rightarrow \left[\frac{x}{1} \right] = \frac{1}{9}$$



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

$$x + 2 = -2 \Rightarrow x_s = -\frac{2}{1} = -2$$

$$x^2 + 2 = 0 \mid (x+2)^2 - 2x = 0$$

$$x^2 = -\frac{1}{2}$$

$$y = a(x^2 + 2x + \frac{1}{2}) \Rightarrow 1 = a(1 + 2 + \frac{1}{2}) \Rightarrow a = \frac{2}{5} \quad y = -\frac{2}{5}(x^2 + 2x + \frac{1}{2}) \Rightarrow y = -\frac{1}{5}$$

$$-x^2 + 2x + m = 0 \Rightarrow x^2 - 2x - m = 0 \quad -4 \leq m \leq -3$$

$$x < \frac{9}{2}, \quad y < \frac{9}{2} \quad f(\frac{9}{2}) > 0 \quad \Delta = 20 + 4m \geq 0 \Rightarrow m \geq -5$$

$$f(\frac{9}{2}) = (\frac{9}{2})^2 - 2(\frac{9}{2}) - m \leq \frac{41}{2} = \frac{40}{2} - m = -\frac{9}{2} - m$$

$$-\frac{9}{2} - m > 0 \quad m < -\frac{9}{2} \quad m \leq -3$$

$$m > 0, y_{min} = -\frac{\Delta}{r} = r \Rightarrow -\frac{144 - 4m(am-1)}{4m} \Rightarrow \frac{r \cdot m^2 - 4m - 144}{4m} \Rightarrow \frac{4(am^2 - m - 36)}{4m} = r$$

$$\Rightarrow \frac{4am^2 - m - 36}{m} = r \Rightarrow 4am^2 - 36 - m = rm$$

$$4am^2 - m - 36 = 0 \Rightarrow m = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{1 \pm \sqrt{9 - 4(4)x - 36}}{2 \cdot 4} = \frac{1 \pm \sqrt{169}}{8} = \frac{1 \pm 13}{8}$$

$$m = 3$$

$$x = \frac{-b}{2a} = \frac{1}{4m} = \frac{1}{12} \checkmark$$

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α, a, β

$$x^2 + r(a+1)x + (ra-1) = 0$$

$$\alpha^2 = \alpha + \beta$$

$$\alpha^2 = ra - 1$$

$$\alpha\beta = ra - 1$$

$$\alpha^2 - ra + 1 = 0$$

$$a = 1 \checkmark$$

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$$x^2 = \frac{v + \sqrt{49 + 1}}{2}$$

$$x = \pm \sqrt{\frac{v + \sqrt{50}}{2}}$$

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 $\delta = 0$

$$p = -\frac{v + \sqrt{49}}{2}$$

$$2p^2 - 3sp + 2s = 2x \Rightarrow \frac{49 + 49 + 14\sqrt{49}}{4} = (49 + 7\sqrt{49}) \checkmark$$

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$$y = kx^2 - 4x - 6$$

$$y_v = k\left(\frac{r}{k}\right) - 4\left(\frac{r}{k}\right) - 6 = \frac{r}{k} - \frac{4}{k} - 6 = \frac{r}{k} - 6$$

$$y = -4x - 6$$

$$-\frac{r}{k} - 6 = -4\left(\frac{r}{k}\right) - 6 = -\frac{4r}{k} - 6$$

$$x_v = -\frac{b}{2a} = \frac{r}{4k} = \frac{r}{k}$$

$$\frac{r}{k} = 2 \quad k = 2$$

$$y_v = -\frac{r}{2} - 6 = -2 - 6 = -8 \checkmark$$

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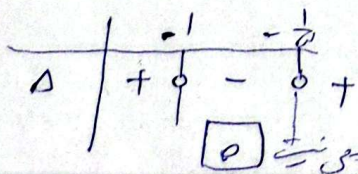
$$y = -mx^2 + mx + 1$$

$$y = -m - x$$

$$-mx^2 + (m+1)x + m + 1 = 0$$

$$\Delta < 0 \quad (m+1)^2 + 4m(m+1) < 0$$

$$(m+1)(5m+1) < 0$$



بین حش یک و حش یک پنجم هیچ عدد صحیح نیست

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