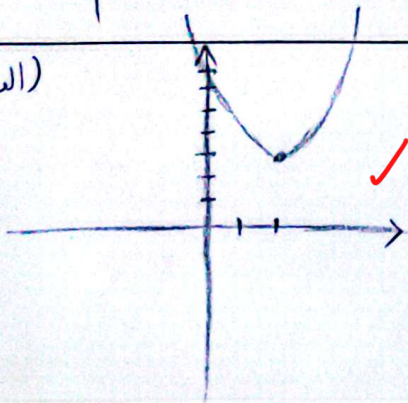


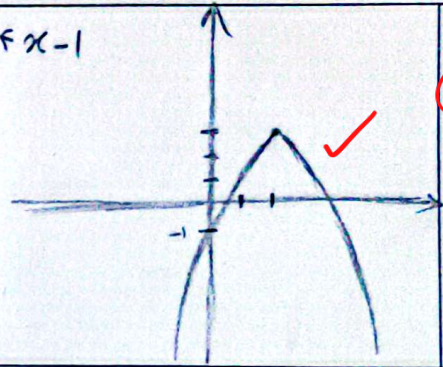
۱۸/۲۵

نام و نام خانوادگی امیر حبیب میرزایی پاسخنامه تشریحی تکلیف شماره ۱۲ کلاس یازدهم

الف)



ب) $y = -x^2 + 4x - 1$



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الف) $(m+1)^2 - 1(\frac{1}{2}m+2) > 0$

$m^2 + 2m + 1 - \frac{1}{2}m - 2 > 0 \rightarrow m^2 + \frac{3}{2}m - 1 > 0$

$\rightarrow (m-1)(m+2) > 0 \rightarrow (-\infty, -2) \cup (1, +\infty)$

ب) $\Delta = 0 \rightarrow m^2 - 2m - 1 = 0$

$\Rightarrow m = -1 \text{ یا } 3$

ج) $\Delta < 0 \rightarrow m^2 - 2m - 1 < 0 \rightarrow (-3, 3)$

د) $m^2 - 2m - 1 > 0 \rightarrow (-\infty, -3] \cup [3, +\infty)$

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الف) $\Delta > 0$

$\frac{1}{m-2} > 0 \rightarrow m > 2$

$\frac{2(m+1)}{m-2} < 0 \Rightarrow (-1, 2)$

اشتباه

$4(m+1)^2 - 4(m-2) > 0 \rightarrow 4m^2 + 8m + 4 - 4m + 8 > 0$

$\rightarrow 4m^2 + 4m + 12 > 0$

$\frac{c}{a} < 0 \rightarrow \frac{1}{m-2} < 0 \rightarrow m < 2$

$S < 0 \rightarrow \frac{2(m+1)}{m-2} < 0 \rightarrow (-1, 2)$

$(-1, 2)$

۱، ۵

سی زانی از هر جابجایی که نزدیک دور بشی مختلف
الاست داشته باشی

$\frac{c}{a} < 0 \rightarrow \frac{1}{m-2} < 0 \rightarrow m < 2$

$\rightarrow m < 2$

ب)

$-\frac{b}{2a} = \frac{4(m+1)}{4(m-2)} = -2$

$\rightarrow m+1 = 2m-4$

$3m = 3 \rightarrow m = 1$

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$\Delta = 0$

$f(\sin \alpha) - f(\frac{2}{3})(\frac{3}{4}) = 0$

$f(\sin \alpha) - 4 = 0 \rightarrow \sin^2 \alpha = 1 \Rightarrow \sin \alpha = 1$

$\sin \alpha = 1 \rightarrow \frac{2u^2}{3} - 2u + \frac{3}{4} = 0 \rightarrow (2u-3)^2 = 0 \rightarrow u = \frac{3}{2}$

سوال مقدار ریشه رو میخواند!

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$$y = \frac{(x^2 - 2x - 1)(x^2 - 2x - 1)}{1 - x^2} \rightarrow y = \frac{(x-1)(x+1)(x+1)(x-1)}{1-x^2}$$

$$= \frac{(x^2 - 1)(x^2 - 1)}{1 - x^2} \Rightarrow y = -4x^2 + 12x + 4 \rightarrow a = -4 < 0$$

$$x_s = \frac{-12}{-4} \rightarrow y_s = y_{\max} = \frac{-4}{4a} \Rightarrow \frac{-(144 + 16)}{-4 \cdot 4} = \boxed{\frac{280}{16}} \checkmark$$

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

$$2S = 2p + v$$

$$2x \cdot \frac{m+2}{m} = 2\left(\frac{2}{m}\right) + v \xrightarrow{x=m} 2m + 4 = -10 + vm \rightarrow 2m = 14 \rightarrow \boxed{m=7} \checkmark$$

$$A = x_1^2 + x_2^2 = (x_1 + x_2)^2 - 2x_1x_2 \rightarrow x_1 + x_2 = \frac{-b}{a} = \frac{4}{7} = \frac{4}{7}$$

$$x_1x_2 = \frac{c}{a} = \frac{-2}{7} = -\frac{2}{7} \Rightarrow A = \frac{16}{49} - 2\left(-\frac{2}{7}\right) = \frac{16}{49} + 1 = \boxed{\frac{135}{49}} \checkmark$$

$$\frac{f\alpha + \beta^2}{2\beta^2}$$

$$\rightarrow \alpha + \beta = 4, \alpha\beta = 2$$

$$\frac{f\alpha + \beta^2}{2\beta^2} = \frac{19(2\beta - 10)}{2\beta^2} = \boxed{19} \checkmark$$

$$\rightarrow \beta^2 = 4\beta - 2 \Rightarrow \beta^2 - 4\beta + 2 = 0$$

$$f\alpha + \beta^2 = f(4 - \beta) + (4\beta - 2) = 4f\beta - 19 \Rightarrow 4\beta^2 = 4(4\beta - 2) = 16\beta - 8$$

$$\rightarrow y_1 = ax^2 + bx + f$$

$$y_1 = x^2 + 3x + f \Rightarrow \frac{-b}{2a} = \boxed{\frac{-3}{2}} \checkmark$$

$$\xrightarrow{2} 1f = fa + 2b + f$$

$$\xrightarrow{-2} f = 9a - 3b + f$$

$$\rightarrow \begin{cases} 9a - 3b = 0 \xrightarrow{x^2} 11a - 4b = 0 \\ fa + 2b = 10 \xrightarrow{x^2} 12a + 4b = 20 \end{cases}$$

$$\rightarrow 10a = 20 \rightarrow \boxed{a=2} \checkmark \rightarrow b = 3 \checkmark$$

$$2x^2 + (m+1)x + m + 4 = x$$

$$2x^2 + mx + x + m - 4 = x$$

$$\rightarrow 2x^2 + mx + m - 4 = 0 \xrightarrow{\Delta=0} m^2 - 16m - 16 = 0 \rightarrow (m-12)(m+4) = 0$$

$$\rightarrow m = 12 \text{ or } -4 \checkmark$$