نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ۲۳ کلاس .....

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$$\begin{cases} \frac{-b}{2a} = -1 \rightsquigarrow -b = -2a \rightsquigarrow b = 2a \\ a - b + c = 9 \xrightarrow{b=2a} a - 2a + c = 9 \rightsquigarrow -a + c = 9 \\ 9a + 3b + c = 1 \xrightarrow{b=2a} 9a + 6a + c = 1 \rightsquigarrow 15a + c = 1 \end{cases}$$

$a - c = -9 \rightsquigarrow -18a = 9 \rightarrow a = -\frac{1}{2}$

$c = 8.5 \rightarrow b = -1$

$(15a + c = 1) \times 9 = 135a + 9c = 9$

$-a + c = 15a + 9c \rightsquigarrow 14a = -8c \rightsquigarrow 7a = -c$

$y = -0.5x^2 - x + 8.5$

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$\Delta > 0 \rightsquigarrow m^2 - 8m - 48 > 0$

$-\infty$		-4		12		$+\infty$
	+	۰	−	۰	+	

$\rightsquigarrow m \in (-\infty, -4) \cup (12, +\infty)$

$\frac{c}{a} > 0 \rightsquigarrow \frac{m+4}{2} > 0 \rightsquigarrow m + 4 > 0 \rightsquigarrow m > -4$

$\frac{-b}{a} > 0 \rightsquigarrow \frac{-m}{2} > 0 \rightsquigarrow -m > 0 \rightsquigarrow m < 0$

اشتراک = $m \in (-4, -4)$

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$\frac{-b}{a} = \frac{a}{c} \rightsquigarrow \frac{-2m+1}{3} = \frac{3}{2-m}$

$9 = 2m^2 - 5m + 2 \rightsquigarrow 2m^2 - 5m - 7 = 0 \quad \Delta = 81$

$m = \frac{5 \pm 9}{4} = 3.5, -1$

$m = 3.5, \cancel{-1}$

$m = 3.5$

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$x^2 - x - 2 = 0 \longrightarrow S = 1, P = -2$

معادله مورد نظر: $x^2 - \frac{81}{4}x - \frac{221}{4}$

$x_1^3 + \frac{1}{x_1^3} + x_2^3 + \frac{1}{x_2^3} \Rightarrow S^3 - 3SP + \frac{S^3}{P^3} \Rightarrow 1 + 12 - \frac{1}{4} = \frac{81}{4}$

$P = x_1^3 x_2^3 + \frac{x_1^3}{x_2^3} + \frac{x_2^3}{x_1^3} + \frac{1}{x_1^3 x_2^3} \Rightarrow (P)^3 + \frac{x_1^6 + x_2^6}{S^6 - 2P^3} + \frac{1}{P^3} \Rightarrow -64 + 1 + 8 + \frac{1}{-8} = \frac{-221}{4}$

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$x^2 - \frac{a}{2}x + \frac{6}{3} = 0$

$S \quad P$

$\frac{\alpha}{\beta} \times \frac{9}{4} = \frac{6}{3} \rightsquigarrow \frac{a^2}{48} = \frac{2}{3} \rightsquigarrow 3a^2 = 192 \rightsquigarrow a^2 = 64$

1	$\frac{9}{11}$
3	$\frac{a}{2}$
2	$\frac{a}{12}$

$a = \pm 8$

$a = -8$

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$\min \rightsquigarrow a > 0$

$S < 0$

$\frac{-12 - 2a}{a} < 0 \rightsquigarrow$

	-6		0	
	$-$	0	$+$	$\nexists$	$-$

$P > 0 \rightsquigarrow \frac{6}{a} = \frac{0}{2} > 0$

$a \in (-\infty, -\frac{6}{2}]$

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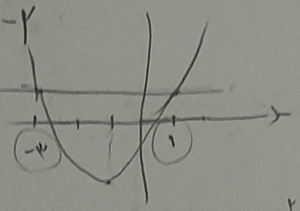
$\begin{cases} \frac{-b}{2a} = \frac{2}{-2} = -1 \\ \frac{-b}{2a} = \frac{-a}{2} = \frac{-1}{1} \rightsquigarrow -a = -2 \end{cases}$

$a = 2$

$x^2 + 2x - 2$

$\begin{cases} -1 \\ -2 \end{cases}$



$x^2 + 2x - 2 = 1$

$\Downarrow$

$x^2 + 2x - 3 = 0 \rightsquigarrow x = -3, \; x = 1$

$y = -x^2 - 2x + b \Rightarrow 1 = -9 + 6 + b$

$1 = -1 - 2 + b$

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$2x^2 - ax + b = 0$

$2ax^2 + ax - 4 = 0 \rightsquigarrow \begin{cases} 2x^2 - x + b = 0 \\ 2x^2 + x - 4 = 0 \end{cases}$

$\alpha + 0.5, \; \beta + 0.5$

$\alpha \quad \beta$

$(\alpha + 0.5)(\beta + 0.5) = 0.25 + \frac{1}{2} - 4 = -3.25$

$b = -3.25$

$\bullet \; \frac{a}{2} = \frac{-\alpha}{2a} + 1 \rightsquigarrow \frac{a}{2} = \frac{1}{2} \rightsquigarrow a = 1$

$\left\{ \frac{-0.5 \times 1}{2} \right\} = -1$

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

$2x = -2m$

$x = -m \rightsquigarrow m^2 - 2m - 2m = m^2 + 4m + m$