نام و نام خانوادگی ، هماهنگی مدرسه - تکلیف شماره ۲۶ / کلاس دهم رشته A

۱۹۱۵

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$\frac{a \pm \sqrt{a^2-4b}}{2} = 1 , 4$ ④

$\frac{a}{1} = 4 \rightsquigarrow a=4 , \quad b = 3\times 1 \Longrightarrow a+b = 4+3 = \boxed{7}$

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x	-1		4
P	$-$ $\circ$	$+$	$\circ$ $-$
	1		1

(-1) = ریشه مضاعف $\Rightarrow (x-3n)^2 = 0$

$x = 3n = (-1) \rightarrow n = \frac{-1}{3}$ ③

$(k-2)x + m - 1 = 0$

$4(k-2) + m - 1 = 0 \rightsquigarrow 4k + m = 9$

$5k + m - 11 < 0 \rightsquigarrow k - 2 < 0 \rightsquigarrow k < 2 \xrightarrow{k \in \mathbb{N}} \boxed{k=1}$

$\Rightarrow m = 9 - 4k = \boxed{5}$

$\frac{m}{n} + k = \frac{-4}{\frac{-1}{3}} + 3 = \boxed{15}$

① $\frac{m}{n} + k = \frac{5}{\frac{-1}{3}} + 1 = \boxed{(-14)}$

② $(k-2)x + m - 1 = x + 4 \rightarrow \begin{cases} k-2 = 1 \rightarrow k = 3 \\ m-1 = (-4) \rightarrow m = (-3) \end{cases}$

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$-\frac{1}{2}x^2 + 2x + 6 > \frac{7}{2} \rightsquigarrow -\frac{1}{2}x^2 + 2x + \frac{5}{2} > 0$ ④

$\frac{-2 \pm \sqrt{4+5}}{-1} = -1 , 5$

	$a=(-1)$		$b=5$	
	$-$ $\circ$	$+$	$\circ$	$-$
	1		1	

$b - a = 5 - (-1) = \boxed{6}$

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$x^4 - 3x^3 - x + 3 = x(x^3-1) - 3(x^3-1) = (x-1)(x+1)(x-3)$

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

$P(2) = (2-1)(2+1)(2-3) = \boxed{-3}$

	-1		$a=1$		$b=3$	
	$-$ $\circ$	$+$	$\circ$	$-$	$\circ$	$+$
	1		1		1	

③

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$(a-1)x^2 + (a-1)x + 1 < 0$ ④

$a - 1 < 0 \rightarrow a < 1$ *1

$\Delta < 0 \rightarrow a^2 + 1 - 2a - 4a + 4 < 0 \rightarrow (a-5)(a-1) < 0$

	1		5	
	$+$ $\circ$	$-$	$\circ$	$+$
	1		1	

$\rightarrow (1,5)$ *2

$\Rightarrow (-\infty, 1) \cap (1,5) = \emptyset$

a در مجموعه ها تعلق دارد

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$A = \frac{m(m^2+m)}{m-2} > 0$

$m<0 \rightarrow m^2+m<0 \rightarrow m(m^2+m)>0$; $m-2<0$; $A>0$ * ; $A<0$ } $A<0$

$m>0 \rightarrow m^2+m>0 \rightarrow m(m^2+m)>0$

$m>2 \rightarrow m-2>0$

$m<2 \rightarrow m-2<0$

$m=2 \rightarrow A=0$ قبول

$\boxed{m>2 \rightarrow A>0}$ ✗

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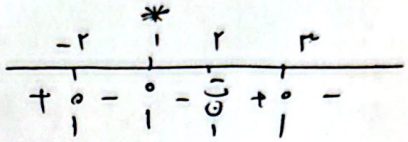
$\frac{(x-2)(x+2)(x-1)^2}{(x^2+x+1)(2-x)^2} \leq 0$



$[-2,2) \cup [2,+\infty)$ ✓

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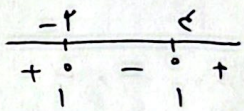
$\frac{2x^2-4x}{x^2+4} < 2 \rightarrow \frac{x^2-2x-8}{x^2+4} < 0$ ✓۱/۵

$\frac{(x-4)(x+2)}{x^2+4} < 0 \rightarrow (-2,4)$



$b-a = 4-(-2) = +6$

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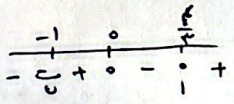
$\frac{x^2-4x}{x+1} < 0$



$\rightarrow (-\infty,-1) \cup (0,2)$ ✓

$\Delta < 0$

$-1 < \frac{x^2-4x}{x+1} \rightarrow \frac{x^2-3x+1}{x+1} > 0 \rightarrow x+1>0 \rightarrow x>-1$

$\Rightarrow (0,2)$

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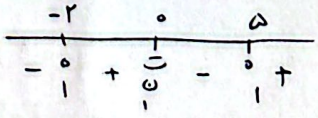
$\frac{x^2-3x+10}{x} \leq 0 \rightsquigarrow \frac{(x-5)(x+2)}{x} \leq 0$



$\Rightarrow (-\infty,-2] \cup (0,5]$ ✓