نام و نام خانوادگی ......[name]...... پاسخنامه تشریحی تکلیف شماره ..۲۲.. کلاس ......A......

$y=ax^2+bx+c$ $y=a(x-x_s)^2+y_s$ $y=a(x+1)^2+9$ $1=a(4+1)^2+9$ $1=16a+9$ $-8=16a$ $\frac{-1}{2}=a$ $-\frac{1}{2}x^2-\frac{1}{2}-x+9=$ $2(-\frac{1}{2}x^2-x+\frac{17}{2}) \rightarrow -x^2-2x+17$	۱
$2x^2+mx+m+6$ $\Delta>0$ $m^2-4(2)(m+6)>0$ $m^2-8m-48>0$ $(m-12)(m+4)>0$ $m>12 \quad m<-4$ $S>0$ $-\frac{b}{a}=-\frac{m}{2}>0$ $m<0$ $P>0$ $\frac{c}{a}=\frac{m+6}{2}>0 \quad m>-6$ $-6<m<-4$	۲
$3x^2+(2m-1)x+2-m=0$ $\Delta>0$ $\frac{b}{a}=\frac{a}{c}$ $a^2=bc$ $\frac{-2m+1}{3}=\frac{3}{2-m}$ $-4m+4m^2+2-m=9$ $4m^2-5m-7=0$ $m^2-5m-14=0$ $(m-7)(m+2)=0$ برای $\frac{7}{2}$ دارای ۲ ریشه است	۳
$x=x^2-4$ $x^2-4-x=0$ $S=+1$ $P=-4$ $\alpha+\beta=(x_1+x_2)^3-3x_1x_2(x_1+x_2)+\frac{x_1+x_2}{x_1x_2}$ $1+12+\frac{1}{-4}=13-\frac{1}{4}=\frac{51}{4}$ $\alpha\beta=(x_1x_2)^3+(x_1+x_2)^2-2x_1x_2+\frac{1}{x_1x_2} \Rightarrow -64+1+8-\frac{1}{4}=-\frac{221}{4}$ $4(x^2-\frac{51}{4}x-\frac{221}{4}=0)$ $4x^2-51x-221=0$	۴
$(\sqrt[3]{x^2}+\frac{1}{\sqrt[3]{x^2}}+1)(\sqrt[3]{x^2}-1)=2\sqrt[3]{x}$ $\sqrt[3]{x^4}+1+\sqrt[3]{x^2}-\sqrt[3]{x^2}-\frac{1}{\sqrt[3]{x^2}}-1=2\sqrt[3]{x}$ $x^2-1=2\sqrt[3]{x^3}$ $x^2-1=2x$ $x^2-2x-1=0$ $x_1+x_2=-\frac{b}{a}$ $\frac{2}{1}=2$	۵

$3x^2 - ax + 4 = 0$ $\qquad \alpha + \beta = \frac{a}{3}$ α $\qquad a = 3(\alpha+\beta) = \pm 8$ 2α $\qquad |a_1 - a_2| = (+16)$ $2\alpha^2 = \frac{4}{3}$ $\qquad \alpha = \frac{2}{3} \Rightarrow \beta = \frac{4}{3} \qquad \alpha+\beta = \frac{8}{3}$ $\alpha^2 = \frac{4}{9}$ $\qquad \alpha = -\frac{2}{3} \qquad \beta = -\frac{4}{3} \qquad \alpha+\beta = -\frac{8}{3}$	۶
$ax^2 + (3+2a)x = y$ $a > 0$ $\qquad$ جواب ندارد $\frac{-2a-3}{a} > 0$ $-\frac{3}{2} < a < 0$	۷
$\frac{-a}{2} = \frac{2}{-2}$ $\qquad -a = 2$ $\qquad |a = 2|$ $x^2 + 2x - 2 = 1$ $\qquad x^2 + 2x - 3 \to (-3), (1)$ $(x+3)(x-1)$ $\qquad (a+b) = 8$ $-(x-1)(x+3) + 1 = -x^2 - 2x + 4 \Rightarrow b = 4$	۸
$2x^2 - ax + b = 0 \to 2x^2 + 2x - 24 = 0$ $2ax^2 + ax - 6 = 0$ $\qquad x^2 + x - 12$ $(x+4)(x-3)$ $\alpha + \beta = \alpha' + \beta' + 1$ $\qquad \to \alpha = 4,\ \beta = \frac{3}{2}$ $\frac{a}{2} = \frac{-a}{2} + 1 \qquad |a = 1|$ $\qquad \frac{b}{2} = \alpha\beta = -3$ $\qquad \left[\frac{ab}{f}\right] = \left[-\frac{6}{4}\right] = -2$ $b = -6$	۹
$x^2 + 6x + m = 0 \to S = \alpha + \beta = -6$ $x^2 + 2x - 2m = 0 \to S = \alpha' + \beta' = -2$ $\alpha - \beta - \alpha' - \beta' = -6 + 2 = |-4| = 4$	۱۰