

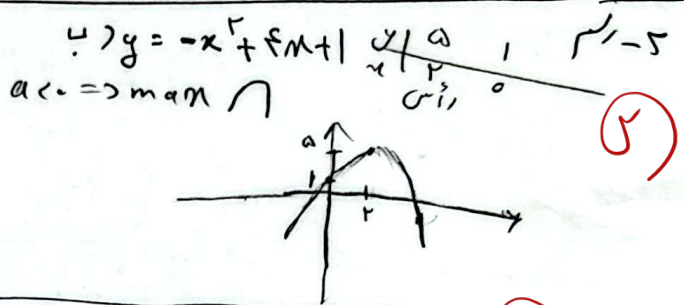
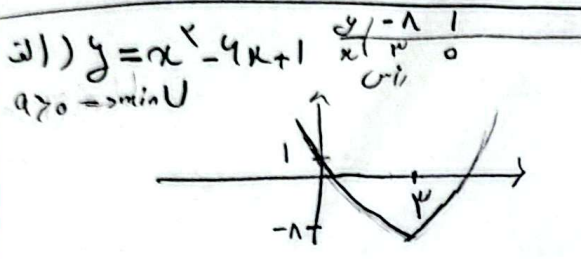
تکلیف ۲۴

کلاس دوم متوسطه

پایه هفتم (۲۵)

الف) $y = 2x^2 - 5x + 1$ ext $\left| \begin{array}{l} -\frac{b}{2a} = \frac{5}{4} = \boxed{1} \\ -\frac{\Delta}{4a} = -\frac{1}{4} = \boxed{-1} \end{array} \right.$
 $a > 0 \Rightarrow \min U$

ب) $y = -2x^2 + 5x - 1$ ext $\left| \begin{array}{l} -\frac{b}{2a} = \frac{5}{-4} = \frac{5}{4} \\ -\frac{\Delta}{4a} = -\frac{-1}{-4} = -\frac{1}{4} \end{array} \right.$
 $a < 0 \Rightarrow \max \cap$



$2x^2 + kx^2 - 4x - 2 = 0$, $a+b = -5$, $a + 3 = 1$, $a > b$
 $x^2 - 5x + p = 0 \Rightarrow x^2 - x - 2 = 0 \Rightarrow (x-2)(x+1) = 0$
 $x = -1 \Rightarrow -k + k + 9 - 2 = 0 \Rightarrow \boxed{k = -7}$

$x^2 - 2mx + m = 0$, $2x^2 - mx - m = 0$
 اختلاف جذور در دو معادله است؟
 $\delta = -\frac{b}{a}$, $p = \frac{c}{a}$
 $(\sqrt{a} - \sqrt{b} = 1)^2 \Rightarrow a + b - 2\sqrt{ab} = 1 \Rightarrow \delta - 2\sqrt{p} = 1 \Rightarrow 2m - 2\sqrt{m} = 1$
 $2m - 2\sqrt{m} - 1 = 0$ $a+b+c=0$ $\frac{c}{a} = -\frac{1}{2}$ $\frac{c}{a} = \frac{m}{2}$

$y = 2x^2 - (m+2)x + m$, $\delta = \frac{4}{2} = 2$, $y = x^2 - mx + 1$
 ① $y = x^2 - 2x + 1 \Rightarrow -\frac{b}{2a} = \frac{2}{2} = \boxed{1}$
 ② $y = x^2 + x + 1 \Rightarrow -\frac{b}{2a} = \frac{-1}{2} = \boxed{-\frac{1}{2}}$

$x=0 \Rightarrow y=m$
 اختلاف در دو معادله است.
 $\delta = \frac{1}{2} \times |m| \times \left| \frac{m}{2} - 1 \right| = \frac{m}{2} \Rightarrow \frac{m}{2} = 2 \Rightarrow m = 4$
 $m^2 - 2m = -1 \Rightarrow m^2 - 2m + 1 = 0$
 $\Delta = b^2 - 4ac = 4 - 4 = 0 \Rightarrow \Delta = 0 \Rightarrow \Delta < 0 \Rightarrow \Delta = 0$
 $m^2 - 2m = 2 \Rightarrow m^2 - 2m - 2 = 0$
 $\Rightarrow (m-2)(m+1) = 0$
 $m \leftarrow -1$

$y = ax^2 + 2x + a$ و $\min = \frac{V}{\lambda}$ چنانچه $a = ?$ $y = -\frac{\Delta}{4ac} = -\frac{b^2 + 4ac}{4ac} = \frac{4a^2 - 9}{4ac}$

$\frac{4a^2 - 9}{4ac} = \frac{V}{\lambda} \Rightarrow 4a^2 - 9 = \frac{4acV}{\lambda} \Rightarrow 4a^2 - 2\lambda a - V = 0$

از آنجایی که a و c هم علامت داشته و a و c مقعر هستند

دو جوابی چون \min داریم $a > 0$ و $P = \frac{c}{a} = -\frac{1\lambda}{\lambda}$ که قابل قبول است

مثبت $b^2 - 4ac$ از منفرد نیست و برای a در نتیجه تکلیف بدست می آید (دو منفرد می شود که بتواند رابطه ضعیف داشته باشد) (هم a و c هم $-4ac$ هر دو مثبتند)

$x^2 - (a+1)x + a = 0$ و $x^2 - (3a+1)x + b = 0$ (رابطه ها) (رابطه ها) (رابطه ها)

$a+b+c=0$ $\frac{c}{a} = a \Rightarrow a=2$ $a=3$ $x^2 - \frac{10a+b}{5} = 0$

$m+m+2=1 \Rightarrow m=4 \Rightarrow 4 \times 4 = 2 \times 4 = P = b$

$|24-3| = 21$ $y = -ax^2 + ax + 2$ و $y = 2bx^2 - b - 1$

$\delta = -\frac{b}{a} = -\frac{a}{-2a} = \frac{1}{2}$ $\delta = \frac{b}{a} = \frac{1}{2} \Rightarrow b = \frac{a}{2}$

$\frac{a}{2} + 2 = -1 \Rightarrow a = -12$ $\frac{b}{2} - \frac{b}{2} - 1 = -1$ $-\frac{a}{12} + \frac{a}{6} + 2 = \frac{a}{12} + 2 = -\frac{9}{4} + 2 = -\frac{1}{4}$ $-\frac{b}{2} = -\frac{1}{4} + 1 = \frac{3}{4} \Rightarrow b = -\frac{3}{2}$

$b - a = -4 + 12 = 8$

$y = 2ax^2 + 2x + B$ $B > a$ $\delta = -\frac{b}{a} = -\frac{2}{2a} = -\frac{1}{a}$ $P = \frac{c}{a} = \frac{B}{2a}$

$\delta = -\frac{1}{a}$ $-\frac{1}{a} = \frac{1}{a} + B \Rightarrow B = -\frac{2}{a}$ $\frac{B}{2a} = \frac{1}{a} + B \Rightarrow B = \frac{2}{a}$

$\frac{1}{2a} = a \Rightarrow a = \pm \frac{1}{2}$ $\delta = -\frac{1}{a}$ $P = \frac{c}{a}$

$S = a^2 + b^2 - 12 = S^2 - 2P - 12$ $P = (a+b) - 1 = S - 1$

$S = S^2 - 2(S-1) - 12 \Rightarrow S^2 - 2S - 10 = 0 \Rightarrow (S-5)(S+2) = 0$ $S = a+b = 15$