

ایلا حفری. تلف ۲۸ ام. (هم دفتر)

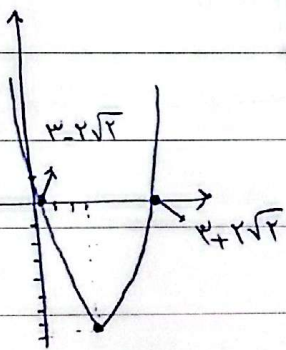
$$\text{الف) } y = 2x^2 - 4x + 1 \rightarrow \min \quad \left| \begin{array}{l} -\frac{b}{2a} = \frac{4}{4} = 1 \\ \Delta = b^2 - 4ac = 16 - 4(2)(1) = 8 \end{array} \right. \quad -1$$

$$\Delta = b^2 - 4ac = 16 - 4(2)(1) = 8 \quad \left| \begin{array}{l} -\frac{D}{2a} = \frac{-8}{4} = -2 \end{array} \right.$$

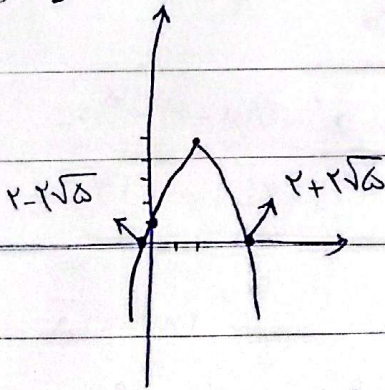
$$\text{ب) } y = -2x^2 + 4x - 6 \rightarrow \max \quad \left| \begin{array}{l} -\frac{b}{2a} = \frac{-4}{-4} = 1 \\ \Delta = b^2 - 4ac = 16 - 4(-2)(-6) = -4 \end{array} \right.$$

$$\Delta = b^2 - 4ac = 16 - 4(-2)(-6) = -4 \quad \left| \begin{array}{l} -\frac{D}{2a} = \frac{-(-4)}{-4} = 1 \end{array} \right.$$

$$\text{الف) } y = x^2 - 4x + 1 \rightarrow \min \quad \left| \begin{array}{l} -\frac{b}{2a} = \frac{4}{2} = 2 \\ \Delta = b^2 - 4ac = 16 - 4(1)(1) = 12 \end{array} \right. \quad -2$$



$$\text{ب) } y = -x^2 + 4x + 1 \rightarrow \max \quad \left| \begin{array}{l} -\frac{b}{2a} = \frac{-4}{-2} = 2 \\ \Delta = b^2 - 4ac = 16 - 4(-1)(1) = 20 \end{array} \right. \quad -2$$



$$\text{الف) } r \rightarrow -\alpha \beta r_s - (-2)r_s - \frac{1}{2} \rightarrow r_s - \frac{1}{2}$$

$$\rightarrow r_s = \frac{1}{2} \rightarrow f\left(-\frac{1}{98}\right) + k\left(\frac{1}{14}\right) + \frac{9}{8} - 2 \rightarrow k = -3$$

$$\sqrt{\alpha} - \sqrt{\beta} = 1 \xrightarrow{\text{مربع}} \alpha + \beta - 2\sqrt{\alpha\beta} = 1 \rightarrow S - 2\sqrt{P} = 1 \quad \text{--- 4}$$

$$\rightarrow S = \frac{-b}{a} = 2m, \quad P = \frac{c}{a} = m \rightarrow S - 2\sqrt{P} = 2m - 2\sqrt{m} = 1$$

$$\rightarrow \frac{c'}{a'} = \frac{-m}{1} = ? \quad \downarrow$$

$$2m - 2\sqrt{m} = 1 \text{ s.o.}$$

$$\sqrt{m} \quad \downarrow \quad \Rightarrow m = +1 \Rightarrow \text{حل } x = 1 \text{ s.o.} \rightarrow \frac{c}{a} = \frac{-1}{1} \quad \leftarrow (2\sqrt{m} + 1)(\sqrt{m} - 1) = 0$$

حل غير صحيح

$$y = 2x^2 - (m+2)x + m \text{ s.o. } \frac{a+b+c}{a} \rightarrow x = 1 \text{ s.o. } m \quad \text{--- 5}$$

$$\rightarrow S = \frac{1}{1} \left| m \left(\frac{m}{1} - 1 \right) \right| = \frac{m}{1} \rightarrow (m(m-2)) = 2$$

$$\left\{ \begin{array}{l} m = -1 \rightarrow \frac{m}{1} = -1 \\ m = 2 \rightarrow \frac{m}{1} = 2 \end{array} \right.$$

$$\Rightarrow \text{حل } \left| \frac{-b}{2a} = \frac{m}{1} = \left(\frac{-1}{1} \right) \text{ و } \left(\frac{2}{1} \right) \right.$$

$$\rightarrow \frac{-\Delta}{2a} = \frac{4ac - b^2}{4a} = \frac{4(a)(a) - 9}{4a} = \frac{4a^2 - 9}{4a} = \frac{1}{1} \quad \text{--- 6}$$

$$\rightarrow 2(4a^2 - 9) = 4a \rightarrow 2(4a^2 - 9a - 9) = 0 \xrightarrow{\text{مربع}} a^2 - 9a - 9 = 0$$

$$(a - 9)(a + 1) = 0$$

$$\hookrightarrow a = \frac{9 \pm \sqrt{81 - 36}}{2} = \frac{9 \pm \sqrt{45}}{2}$$

$$\downarrow$$

$$a = \frac{9}{1} \text{ و } \frac{1}{1}$$

حقوق لا مقدار a ← $\sqrt{\quad}$ \hookrightarrow $\frac{9}{1}$ و $\frac{1}{1}$

چون min می شود
سین که اعداد باید باشد

معادله اول $\rightarrow |\alpha - \beta| = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{b^2 - 4ac}}{|a|} = \frac{\sqrt{a^2 + 1 + 2a - 4a}}{|a|} = \frac{\sqrt{(a-1)^2}}{|a|} = \frac{|a-1|}{|a|}$

$\Rightarrow |a-1| = 2 \Rightarrow \begin{cases} a=3 \\ a=-1 \end{cases}$

معادله دوم $\rightarrow |\alpha' - \beta'| = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{9a^2 + 1 + 2a - 4b}}{|a|} \xrightarrow{a=3} b=24 \rightarrow \frac{c}{a} = 24, 2 \rightarrow \frac{c}{a} = 24, 2 \rightarrow (24, 2)$
 $\xrightarrow{a=-1} b=0 \rightarrow \frac{c}{a} = -1, 0 \rightarrow (1, 0)$

معادله اول $\rightarrow \begin{cases} \frac{-a}{-2a} = \frac{1}{2} \\ \frac{a+11a}{2} \end{cases}$

معادله دوم $\rightarrow \begin{cases} \frac{b}{-2b} = \frac{1}{2} \\ \frac{b-11b}{-2b} \end{cases}$

$\rightarrow 2b(\frac{1}{2}) - b(\frac{1}{2}) - 1 = \frac{a}{2} + 2 \rightarrow a = -12$

$\rightarrow \frac{-a}{12} + \frac{a}{2} + 2 = \frac{-b}{12} - 1 \rightarrow b = -4$

$\Rightarrow b - a = 8$

$\rightarrow S: a^2 + b^2 - 12a + b$

$\rightarrow a^2 + b^2 = (a+b)^2 - 2ab \rightarrow (a+b)^2 - 2(a+b-1) - 12 = 10$

$\rightarrow P: a+b-1 = ab$

$a+b = y \Rightarrow y^2 - 2y - 10 = 0 \Rightarrow (y-5)(y+3) = 0$

$y = a+b = \begin{cases} 5 \\ -3 \end{cases}$

چون a و b اعداد طبیعی هستند.

Subject:

$$\alpha < \beta, \frac{\beta}{\Delta \alpha} \rightarrow \alpha = \frac{1}{\Delta} \rightarrow \alpha = \frac{1}{\Delta}$$

Date:

Sa Su Mo Tu We Th Fr

$$x = \alpha \rightarrow \Delta \alpha \times \frac{1}{\Delta} + \alpha + \beta = 0 \rightarrow \Delta \alpha + \beta = -\alpha \rightarrow \beta = -\Delta \alpha \quad \text{--- 4}$$

$$y = \Delta \left(-\frac{1}{\Delta}\right) x^2 + \alpha x + 1 = -\Delta x^2 + \alpha x + 1 \Leftrightarrow \begin{cases} \alpha = -\frac{1}{\Delta} \\ \beta = 1 \end{cases} \leftarrow \beta > \alpha$$

ext $\left| \frac{-b}{2a} = \frac{-\alpha}{-2\Delta} = \frac{\alpha}{2\Delta} \right.$

$$\frac{-D}{4a} = \frac{ac - b^2}{4a} = \frac{\alpha(-\Delta)(1) - 1}{-4\Delta} = \frac{-\alpha\Delta - 1}{-4\Delta} = \frac{\alpha\Delta + 1}{4\Delta}$$

\Rightarrow (اصول)