

$$x^2 - 6x + 1 = 0 \rightarrow x^2 - 6x + 9 = 8 \rightarrow (x-3)^2 = 8 \rightarrow \text{الف) ①}$$

$$x - 3 = \pm \sqrt{8} \rightarrow \begin{cases} x = 3 + \sqrt{8} \\ x = 3 - \sqrt{8} \end{cases}$$

$$x^2 + 11x + 14 = 0 \rightarrow x^2 + 11x + 14 = 0 \rightarrow (x+2)(x+7) = 0 \rightarrow \text{ب) ②}$$

$$x + 2 = \pm \sqrt{0} \rightarrow x + 2 = \pm 0 \rightarrow \begin{cases} x = -2 \\ x = -2 \end{cases}$$

$$x^2 - 5x + 4 = 0 \rightarrow (x-1)(x-4) = 0 \rightarrow \begin{cases} x = 1 \\ x = 4 \end{cases} \text{الف) ③}$$

$$x^2 - 8x - 12 = 0 \rightarrow (x+2)(x-10) = 0 \rightarrow \begin{cases} x = -2 \\ x = 10 \end{cases} \text{ب) ④}$$

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \rightarrow x^2 - 3x - 8 = 0 \rightarrow \text{الف) ⑤}$$

$$\frac{3 \pm \sqrt{9+32}}{2} = \frac{3 \pm \sqrt{41}}{2} \rightarrow \frac{3 - \sqrt{41}}{2} = \frac{3 + \sqrt{41}}{2}$$

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \rightarrow 2x^2 - 8x + \frac{1}{2} = 0 \rightarrow \text{ب) ⑥}$$

$$\frac{8 \pm \sqrt{64-2}}{4} = \frac{8 \pm \sqrt{62}}{4} = 2 \pm \frac{\sqrt{62}}{2} \rightarrow 2 - \frac{\sqrt{62}}{2}$$

$$x^2 - 3x + 2 = 0 \rightarrow (x-1)(x-2) = 0 \rightarrow \begin{cases} x = 1 \\ x = 2 \end{cases} \text{الف) ⑦}$$

$$5x^2 + x - 3 = 0 \rightarrow x^2 + x - 12 = 0 \rightarrow (x+4)(x-3) = 0 \rightarrow \text{ب) ⑧}$$

$$x = -\frac{1}{5} = -0.2$$

$$\begin{cases} x = \frac{3}{5} = 0.6 \\ x = -\frac{4}{5} = -0.8 \end{cases}$$

$$2x^2 - 12x + 17 = 0 \rightarrow x^2 - 12x + 34 = 0 \rightarrow \text{(الف) (د)}$$

$$(x-8)(x-5) \rightarrow \begin{cases} x = \frac{8}{1} = 8 \\ x = \frac{5}{1} = 5 \end{cases}$$

$$3x^2 - 10x + 17 = 0 \rightarrow x^2 - 10x + 21 = 0 \rightarrow \text{(ب)}$$

$$(x-3)(x-7) \rightarrow \begin{cases} x = \frac{3}{1} = 3 \\ x = \frac{7}{1} = 7 \end{cases}$$

$$-3x^2 + 8x - 1 = 0 \rightarrow 28 - \frac{4(-3x-1)}{-14} = +13 \text{ (الف) (ع)} \rightarrow \frac{0}{-14}$$

$$2x^2 - x + 2 = 0 \rightarrow 1 - \frac{4(2 \times 2)}{-14} = -15 \text{ (ب)} \rightarrow \text{ندارد (جواب)}$$

$$2x^2 - 4x + 2 = 0 \rightarrow 14 - \frac{4(2 \times 2)}{14} = 0 \text{ (ج)} \rightarrow \text{ندارد (جواب)}$$

$$2x^2 - x + 1 = 0 \rightarrow 1 - \frac{4(2)}{-14} = -\frac{7}{7} \text{ (د)} \rightarrow \text{ندارد (جواب)}$$

بند ۲: فرمول (۱) را در ϵa قرار دهیم $\rightarrow$ معادله $2a^2 - 3a + a_{50} = 0$ ☒

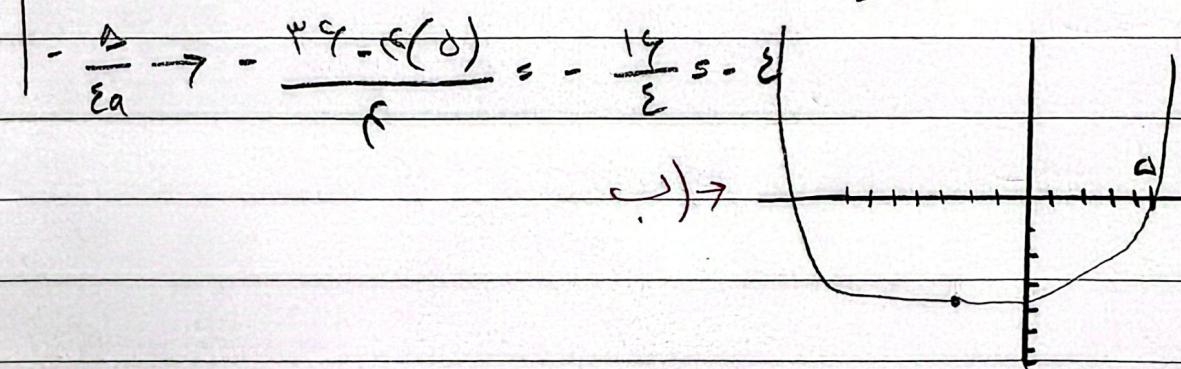
(۵) الف) (دلتا = +) $9 - \underbrace{\epsilon(2a)}_{-\Delta a} = + \rightarrow a < \frac{9}{\Delta}$

ب) (دلتا = ۰) $9 - \underbrace{\epsilon(2a)}_{-\Delta a} = 0 \rightarrow a = \frac{9}{\Delta}$

ج) (دلتا = -) $9 - \Delta a = - \rightarrow a > \frac{9}{\Delta}$

د) (دلتا = + و ۰) $9 - \Delta a = + و ۰ \rightarrow a \leq \frac{9}{\Delta}$

(۸) الف) (مینیمم دار) $-\frac{b}{2a} \rightarrow -\frac{9}{2} = -3$



(۹) الف) (ماکسیمم دار) $-\frac{\epsilon}{2} = 2$

$-\frac{14 - \epsilon(3)}{-2} = -\frac{\epsilon}{-2} = 1$

ب) 1 و 3



(۱۰) الف) $S = -\frac{b}{a} = -\frac{-3}{1} = 3$ $p = \frac{c}{a} = \frac{-2}{1} = -2$

ب) $3 - (3 \times 3 - 2) = 27 + 18 = 45$ $3 - (-2 \times 2) = 9 + 4 = 13$