

$$\max \rightarrow \frac{-\Delta}{f_a} = V \Rightarrow \frac{-(b^2 + 12)}{-f} = V \Rightarrow b^2 + 12 = 24 \Rightarrow b^2 = 12 \Rightarrow b = \pm \sqrt{12}$$

(ii) $f(x) = x^2 + 2x^2 + 3 \rightarrow x^2 + 2x^2 = -3 \rightarrow$ مستحيل

$$\text{ب) } (t-x^2)^2 - (t-x^2) - 1 = 0 \rightarrow t^2 - 2tx - 1 = 0 \Rightarrow (t-\Delta)(t+\Delta) = 0$$

$$t - x^2 = -3 \rightarrow x^2 = V \rightarrow x = \pm \sqrt{V}$$

$$t - x^2 = \Delta \rightarrow x^2 = -1 \quad \text{X}$$

$$\alpha = \beta + 2 \quad \alpha + \beta = \frac{-(-14)}{2} = 7 \Rightarrow 2\beta + 2 = 7 \Rightarrow \beta = 1, \alpha = 1 + 2 = 3$$

$$\alpha \cdot \beta = \frac{m}{2} \Rightarrow (1)(3) = \frac{m}{2} \Rightarrow m = 12 \rightarrow \Delta > 0 \quad \checkmark \Rightarrow m = 12$$

$$S = \alpha + \beta = \frac{4}{2} = 2 \quad \left. \begin{array}{l} 2\alpha = 4 \\ \alpha = 2, \beta = 0 \end{array} \right\} \Rightarrow \rho = 2x_0 = \frac{m-1}{2} \Rightarrow m-1 = 0 \Rightarrow m = 1$$

$$\alpha\beta = 1 = \frac{m^2 - 2}{-m} \rightarrow m^2 - 2 = -m \Rightarrow m^2 + m - 2 = 0 \Rightarrow (m+2)(m-1) = 0$$

$$\left. \begin{array}{l} m = -2 \rightarrow 4x^2 + 2x + 1 = 0 \Rightarrow \Delta < 0 \quad \text{X} \\ m = 1 \rightarrow x^2 - 1 = 0 \Rightarrow \Delta = 4 \quad \checkmark \end{array} \right\} \underline{m=1}$$

$$x^2 - mx + 3 = 0 \rightarrow \alpha\beta = 3 \quad \alpha\beta = \frac{\alpha}{\beta} \times \beta = 3 \Rightarrow \beta = \frac{3}{\alpha}, \alpha = \frac{3}{\beta} = \frac{9}{\alpha} \Rightarrow \alpha^2 = 9 \Rightarrow \alpha = \pm 3$$

$$\alpha + \beta = \frac{4}{3} + \frac{9}{4} = m \rightarrow m = \frac{14 + 27}{12} = \frac{41}{12} \rightarrow \Delta > 0 \quad \checkmark \Rightarrow m = \frac{41}{12}$$

$$\alpha, \frac{3}{\alpha} \rightarrow S = 4\alpha = 6 \Rightarrow \alpha = 1, \beta = 3 \quad \rho = m = 3 \rightarrow \Delta > 0 \quad \checkmark$$

$$\alpha\beta = 3 \rightarrow \beta = \frac{3}{\alpha}, \alpha + \beta = 4 \Rightarrow \alpha + \frac{3}{\alpha} = 4 \Rightarrow (\alpha + \frac{3}{\alpha})^2 = 4 \times 2 (\alpha + \frac{3}{\alpha})$$

$$\Rightarrow 3\alpha^2 - 2\alpha + 3 = 0$$

Subject:

Date:

$$h(t) = -10t^2 + \Delta_0 t \rightarrow \text{max} \left| \begin{array}{l} \frac{-\Delta_0}{-20} = \frac{\Delta_0}{20} \\ \frac{-12\Delta}{20} + \frac{2\Delta_0}{20} = \frac{12\Delta}{20} \end{array} \right| \rightarrow \text{max } h$$

-4

$$\text{بوجود هم زنی} \rightarrow h=0 \Rightarrow 10t(-t+\Delta) \rightarrow t=0 \text{ و } t=\Delta$$

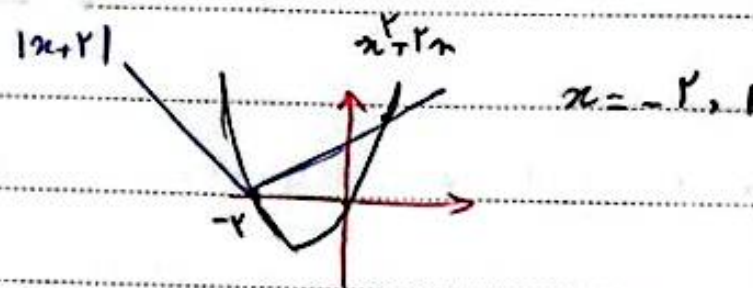
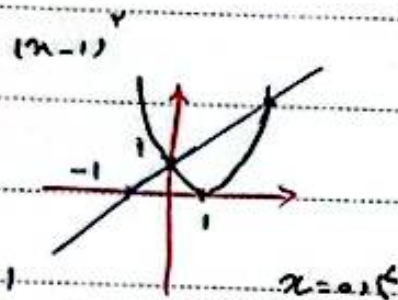
$\rightarrow t=\Delta$ به عنوان

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$$\text{الف) } (x-1)^2 = 2x+1$$

$$\text{ب) } x^2+2x = |x+2|$$

-10



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