

$$b^r + 1r = r \Rightarrow b = \pm \epsilon \checkmark$$

14, 15

سوال ۱
(۲) - ۱

$$ا) \Delta = -1 < 0 \checkmark$$

(۲) - ۲

$$ب) z^r - rz - 1 = 0 \begin{cases} r - m^r + r = 0 \Rightarrow m = \pm \sqrt{r} \checkmark \\ r - m^r - a = 0 \Rightarrow m^r = r - a \end{cases}$$

$$S = r\alpha + r = r \Rightarrow \alpha = 1 \Rightarrow \beta = r \Rightarrow p = \frac{m}{r} = r \Rightarrow m = 1 \checkmark$$

(۲) - ۳

$$\beta = r\alpha - \epsilon \Rightarrow \alpha = r \Rightarrow p = \frac{m-1}{r} = 0 \Rightarrow m = 1 \checkmark$$

(۲) - ۴

$$p = 1 \Rightarrow \frac{m^r - r}{-m} = 1 \begin{cases} m = 1 \checkmark \text{ فقط } \Delta > 0 \\ m = -r \checkmark \text{ فقط } \Delta = 0 \end{cases}$$

(۲) - ۵
برعکس!

$$p \times \beta = r \Rightarrow \frac{r}{\alpha} = r \Rightarrow \beta = \frac{r}{\alpha} \Rightarrow S = m = \frac{r}{\alpha} + \frac{r}{r} = \frac{r}{\alpha} + 1 \checkmark$$

(۲) - ۶

$$س. S = r\beta + \beta \Rightarrow \beta = 1 \text{ و } \alpha = r \Rightarrow p = r \checkmark$$

(۲) - ۷

$$S = v \quad p = r \quad p = \frac{r}{\alpha} \Rightarrow \beta^r = \frac{1}{\alpha^r} \Rightarrow \alpha^r + \frac{1}{\alpha^r} = S^r - r\beta = 1 \checkmark$$

(۲) - ۸

$$h_{max} = \frac{v_0^2}{2g} = \frac{20}{2 \times 10} = 1 \text{ m}$$

$h=0 \Rightarrow t=0$ و $t=\frac{1}{5}$

9 - 0

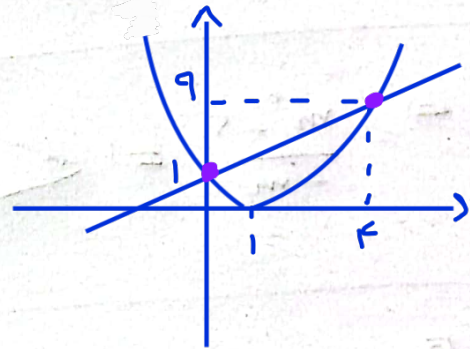
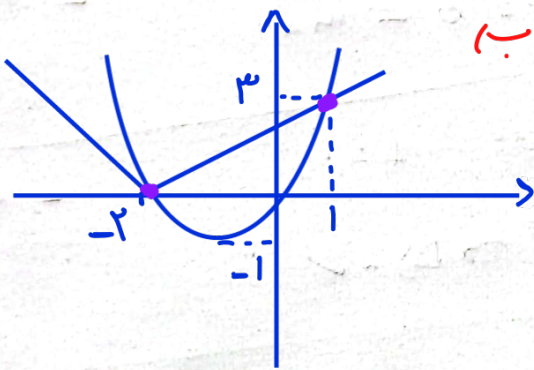
$$m^2 - 2m + 1 = 2m + 1 \Rightarrow m=0 \text{ و } m=2$$

10 - 0.5

$$m^2 + m - 2 = 0 \Rightarrow m=1 \text{ و } m=-2$$

$$m^2 + 2m + 2 = 0 \Rightarrow m=-1 \text{ و } m=-2$$

سوال لغت به روش هندسه!



الف

$$\max_{\text{ارتفاع}} = -\frac{\Delta}{4a} = -\frac{(-2500)}{4 \times 1} = 625 \text{ m}$$

9

$$-10t^2 + 50t = 0 \Rightarrow \begin{cases} t=0 & \text{شروع حرکت} \\ t=5 & \text{برخورد} \end{cases}$$