

۲- الف) جمع ۲ تا عدد ناشقی باید حقیقی که صفر نیست ✓  
 $\varepsilon - x^2 \leq t \quad t^2 - 2t - 1 \leq 0 \Rightarrow \begin{cases} 0 \\ -2 \end{cases}$   
 $\begin{cases} 0 & \varepsilon - x^2 \leq 0 \rightarrow -x^2 \leq 1 \Rightarrow x^2 \leq 1 \Rightarrow x \in [-1, 1] \\ -2 & \varepsilon - x^2 \leq -2 \Rightarrow x^2 \geq 2 \Rightarrow x \in (-\infty, -\sqrt{2}] \cup [\sqrt{2}, \infty) \end{cases}$   
 دقت!  $x = \pm\sqrt{2}$

رسانه توانی را در یزد هم پسر ۱۹, ۷۵  
 ۱- (۲)  $y_2 = \frac{\Delta}{\varepsilon_a} = \frac{-(b^2 + 12)}{-f} = 7$   
 $b^2 + 12 = 21 \Rightarrow b^2 = 9 \Rightarrow b = \pm 3$  ✓

۴- (۲)  $5 \leq \frac{f}{p} \leq 2 \Rightarrow 2\alpha + 2\beta = f = 2\alpha - \beta$   
 $2\alpha + 2\beta \leq 2\alpha - \beta \Rightarrow \beta \leq 0$   
 $\alpha = 2 \Rightarrow p = 0 \Rightarrow \frac{m-1}{3}$   
 $\Rightarrow m = 1$  ✓

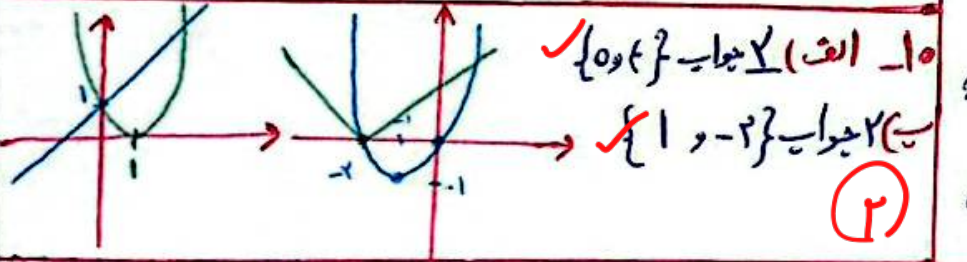
۳- (۲)  $\alpha, \alpha + 2$   
 $5 \leq 2\alpha + 2 = \frac{14}{\varepsilon} = f \Rightarrow \alpha = 1$  ✓  
 $p = 2 = \frac{m}{f} \Rightarrow m \leq 12$  ✓  $\alpha + 2 = 3$

۶- (۲)  $p = \alpha\beta \leq 2 \Rightarrow 2\beta \geq f \Rightarrow \beta \geq \frac{f}{2}$   
 $\frac{14}{9} - \frac{\varepsilon m}{2} + 2 \geq 0 \quad 14 + 2\varepsilon = 12m$   
 $\varepsilon = 12m \rightarrow m = \frac{42}{12}$  ✓

۷- (۲)  $\Delta > 0 \Rightarrow 14 > (-m)(m^2 - 2)$   
 $p = 1 \Rightarrow a = c$   
 $\rightarrow m^2 + m - 2 = 0 \Rightarrow \begin{cases} 1 \rightarrow \Delta > 0 \checkmark \\ -2 \rightarrow \Delta = 0 \times \end{cases}$  ✓

۱- (۲)  $x^2 - 7x + 2 > 0$   
 $\alpha, \beta \rightarrow \alpha\beta \leq 2 \Rightarrow \beta \leq \frac{2}{\alpha} \quad \beta^2 = \frac{1}{\alpha^2}$   
 $\Rightarrow \alpha^2 + \beta^2 \leq 5 - 2p \leq 5 - 2(4 - 2) = 5 - 4 = 1$  ✓

۷- (۲)  $\alpha, 2\alpha$   
 $5 \leq f\alpha \leq f \Rightarrow \alpha = 1$   
 $p = 1 \times 2 = 2 = m$  ✓



۹- (۲) نقطه لسن توپ  $\rightarrow 0$   
 برخورد به زمین  $\rightarrow 5$   
 $x_2 = \frac{-50}{-20} = \frac{5}{2}$   
 $y_2 = \frac{-400}{\varepsilon} + \frac{200}{2} = \frac{200}{\varepsilon} = \frac{1200}{2} = 600$  ✓