

رسانه توانی راد و زدهم پسر B

۲- الف) جمع ۲ تا عدد ناشقی با به حقیقت که صفر نیست

$$\begin{aligned} \varepsilon - x^2 &\leq t \quad t^2 - 2t - 1 \leq 0 \Rightarrow \begin{cases} 1 \\ -2 \end{cases} \\ \text{داده} \quad \varepsilon - x^2 &\leq 0 \Rightarrow -x^2 \leq -1 \Rightarrow x^2 \geq 1 \Rightarrow x = \pm 1 \\ p &= -1.5 \end{aligned}$$

$$\begin{aligned} 1- \quad y_3 &= \frac{\Delta}{\varepsilon a} = \frac{-(b^2 + 12)}{-f} = 7 \\ b^2 + 12 &= 21 \Rightarrow b^2 = 9 \Rightarrow b = \pm 3 \end{aligned}$$

$$\begin{aligned} 3 &\leq \frac{f}{p} \leq 2 \Rightarrow 2\alpha + 2\beta = f = 2\alpha - \beta \\ 2\alpha + 2\beta &\leq 2\alpha - \beta \Rightarrow \beta \leq 0 \\ \alpha &= 2 \} \Rightarrow p = 0 = \frac{m-1}{3} \\ &\Rightarrow m = 1 \end{aligned}$$

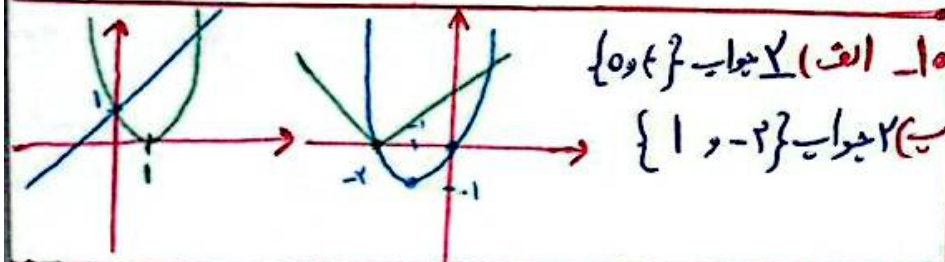
$$\begin{aligned} 3- \quad \alpha, \alpha + 2 \\ 3 &\leq 2\alpha + 2 = \frac{14}{\varepsilon} = f \Rightarrow \alpha = 1 \\ p &= 2 = \frac{m}{f} \Rightarrow m = 12 \quad \boxed{\alpha + 2 = 3} \end{aligned}$$

$$\begin{aligned} 4- \quad p = \alpha\beta \leq 2 \Rightarrow 2\beta \geq f \Rightarrow \beta = \frac{f}{2} \\ \frac{14}{9} - \frac{\varepsilon m}{3} + 2 &\geq 0 \quad 14 + 27 = 12m \\ \varepsilon &\leq 12m \Rightarrow m = \frac{43}{12} \end{aligned}$$

$$\begin{aligned} \Delta &> 0 \Rightarrow 14 > (-m)(m^2 - 2) \\ p &= 1 \Rightarrow a = c \\ &\rightarrow m^2 + m - 2 = 0 \Rightarrow \begin{cases} 1 \rightarrow \Delta > 0 \\ -2 \rightarrow \Delta = 0 \end{cases} \end{aligned}$$

$$\begin{aligned} 5- \quad x^2 - 7x + 2 &\geq 0 \\ \alpha, \beta &\rightarrow \alpha\beta \leq 2 \Rightarrow \beta \leq \frac{2}{\alpha} \quad \beta^2 = \frac{1}{\alpha^2} \\ \Rightarrow \alpha^2 + \beta^2 &\leq 5 - 2p \leq 5 - 2(4 - 2) = 5 - 4 = 1 \end{aligned}$$

$$\begin{aligned} 6- \quad \alpha, 2\alpha \\ 3 &\leq f\alpha \leq f \Rightarrow \alpha = 1 \\ p &= 1 \times 2 = 2 = m \end{aligned}$$



$$\begin{aligned} 9- \quad \text{نقطه لیس توپ} \rightarrow 0 \rightarrow 0 \\ \text{برخوردی نیست} \rightarrow 5 \\ -10 + 2 + 10 + 0 = 0 \Rightarrow \begin{cases} 0 \\ 5 \end{cases} \\ x_3 &= \frac{-50}{-20} = \frac{5}{2} \\ y_3 &= \frac{-400}{\varepsilon} + \frac{200}{2} = \frac{200}{\varepsilon} = \frac{1200}{2} = 600 \end{aligned}$$