

بنیامین النور - تالیف ۱۴ - یازدهم پسر B

$$\frac{-\Delta}{\epsilon a} = v \rightarrow \frac{t^2 - b^2}{t^2} = v \rightarrow b^2 = 21 - 12 = 9 \rightarrow |b = 3, -3| \quad (1)$$

(الف) $\rightarrow$ معادله (۱) است $\rightarrow$ ریشای ندارد / (ب) $\epsilon - x^2 = t \rightarrow t^2 - 2t - 15 \rightarrow (t-5)(t+3)$ (۲)

$\epsilon - x^2 = 5 \rightarrow x^2 = -1$ غلط / $\epsilon - x^2 = -3 \rightarrow x^2 = 3 \rightarrow x = \pm\sqrt{3}$

$$\alpha = \beta + 2 \rightarrow S = 4 = B + B + 2 = 2B + 2 \rightarrow 2B = 2 \rightarrow B = 1 \Rightarrow \alpha = 3 \rightarrow P = \frac{m}{r} = 3 \Rightarrow m = 12 \quad (3)$$

$$2\alpha - \beta = 4 \Rightarrow \beta = 2\alpha - 4 \rightarrow S = 4 = 3\alpha - 4 \rightarrow \alpha = 2 \rightarrow \beta = 0 \Rightarrow \frac{m-1}{r} = 0 \Rightarrow m = 1 \quad (4)$$

$$\alpha = \frac{1}{\beta} \rightarrow \frac{m^2 - 2}{-m} = 1 \Rightarrow m^2 + m - 2 = 0 \rightarrow (m+2)(m-1) \rightarrow \begin{cases} -x^2 + 4x - 1 = 0 \\ 2x^2 + 4x + 2 = 0 \end{cases} \rightarrow m = -2, 1 \quad (5)$$

$$\alpha\beta = \frac{r}{\beta} \Rightarrow P = 3 = \frac{r}{\beta} \Rightarrow \beta = \frac{r}{3} \Rightarrow \alpha = 4 \times \frac{9}{16} = \frac{9}{4} \Rightarrow S = m = \frac{16+27}{16} = \frac{43}{16} \quad (6)$$

$$\alpha = 3\beta \Rightarrow S = 4 = 4\beta \rightarrow B = 1 \Rightarrow \alpha = 3 \Rightarrow m = 3 \quad (7)$$

$$P = \alpha\beta = 2 \Rightarrow \alpha = \frac{2}{\beta} \Rightarrow \alpha^2 + \frac{\Delta}{\alpha^2} = \alpha^2 + \beta^2 = S^2 - 2PS = 4(49 - 4) = 180 \quad (8)$$

$S = 4$

$$\text{Max} = \text{مسئله} \rightarrow \frac{-b}{\epsilon a} = \frac{-\Delta}{-r} = \frac{r_1 \Delta}{r_2} = \frac{\frac{r_1 \Delta}{r_2}}{\frac{r_1 \Delta}{r_2}} = \frac{12\Delta}{r} = 92, \Delta = u_h \quad (9)$$

