

18, 25

بنیامین لودریج - تالیف ۱۴ - یازدهم پسر B

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

(الف) $\rightarrow$ معادله (4) است $\rightarrow$ ریشای ندارد $\checkmark$ / ب) $x^2 = t \rightarrow t^2 - 2t - 15 \rightarrow (t-5)(t+3)$ (2) (3)

$x^2 = 5 \rightarrow x = \pm \sqrt{5}$ $\checkmark$ / $x^2 = -3 \rightarrow x^2 = v \rightarrow x = \pm \sqrt{v}$ $\checkmark$

$$\alpha = \beta + 2 \rightarrow S = 4 = B + B + 2 = 2B + 2 \rightarrow 2B = 2 \rightarrow B = 1 \checkmark \Rightarrow \alpha = 3 \checkmark \Rightarrow P = \frac{m}{k} = 3 \Rightarrow m = 12 \quad (4) \quad (5)$$

$$2\alpha - \beta = 4 \Rightarrow \beta = 2\alpha - 4 \rightarrow S = 4 = 3\alpha - 4 \Rightarrow \alpha = 2 \rightarrow \beta = 0 \Rightarrow \frac{m-1}{3} = 0 \Rightarrow m = 1 \quad \checkmark \quad (6) \quad (7)$$

$$\alpha = \frac{1}{\beta} \rightarrow \frac{m^2 - 2}{-m} = 1 \Rightarrow m^2 + m - 2 = 0 \rightarrow (m+2)(m-1) = 0 \rightarrow m = -2, 1 \quad \checkmark \quad (8) \quad (9)$$

$\Delta = 0$ $\checkmark$

$$\alpha\beta = \frac{4}{\beta} \Rightarrow P = 3 = \frac{4}{\beta} \Rightarrow \beta = \frac{4}{3} \Rightarrow \alpha = 4 \times \frac{3}{4} = 3 \Rightarrow S = m = \frac{12+21}{12} = \frac{33}{12} \quad \checkmark \quad (10) \quad (11)$$

$$\alpha = 3\beta \Rightarrow S = 4 = 4\beta \rightarrow B = 1 \Rightarrow \alpha = 3 \Rightarrow m = 3 \quad \checkmark \quad (12) \quad (13)$$

$$P = \alpha\beta = 2 \Rightarrow \alpha = \frac{2}{\beta} \Rightarrow \alpha^2 + \frac{\Delta}{\alpha^2} = \alpha^2 + \beta^2 = S^2 - 2PS = v \left(\frac{49}{4} - 4 \right) = \frac{13}{4} \quad \checkmark \quad (14) \quad (15)$$

$S = v$

$$\text{Max} = \text{نسبت} \rightarrow \frac{-b}{\epsilon a} = \frac{-\Delta}{-x_0} = \frac{x_1 \Delta}{x_0} = \frac{12 \Delta}{2} = 6 \Delta = \mu_h \quad \checkmark$$

نسبت ب.؟ $\rightarrow \begin{cases} t=0 \\ t=\Delta \end{cases}$ $\rightarrow -10t^2 + 20t = 0$

