

بنیامین فورڈ - تکلیف ۱۳ - یازدهم لیسر

$$\frac{-b}{2a} = \frac{-1}{2(a-1)} = 2 \rightarrow 4a - 4 = -1 \rightarrow a = \frac{3}{4} \rightarrow -x^2 + 4x + 12 = 0 \rightarrow \frac{-4 \pm \sqrt{16 + 48}}{-2} \rightarrow \begin{matrix} -2 \\ 6 \end{matrix} \leftarrow \text{جواب} \quad (1)$$

$$a < 0 \rightarrow m < 0 \quad \Delta > 0 \rightarrow 4a - 4m^2 > 0 \rightarrow 4a > 4m^2 \rightarrow \frac{4a}{4} > m^2 \rightarrow -\frac{a}{4} < m < \frac{a}{4} \rightarrow m \in \left(-\frac{a}{4}, \frac{a}{4}\right) \quad (2)$$

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \rightarrow \boxed{b = -3 \mid a = 1.5} \quad 9 - 4c = \Delta \rightarrow \boxed{c = \frac{9}{4}} \rightarrow \frac{9}{4}x^2 - 3x + \frac{9}{4} \rightarrow 9x^2 - 12x + 9 = 0 \quad (3)$$

$$r(\alpha^r + \beta^r) + \beta^r - \alpha^r = r(S^r - r_p) + S\left(\frac{\sqrt{\Delta}}{1a_1}\right) = r(19 - m + r) + r\left(\frac{\sqrt{r\lambda - \lambda m}}{r}\right) = r^2 - rm - r + \sqrt{r\lambda - \lambda m} = r^2$$

$$19 - rm = -\sqrt{r\lambda - \lambda m} \rightarrow \lambda - m = -\sqrt{r\lambda - \lambda m} \rightarrow m^r - 19m + 9r = r\lambda - \lambda m \rightarrow m^r - \lambda m + 19 = 0 \rightarrow (m - r)^r = 0$$

$$\rightarrow \boxed{m = r}$$

$$\frac{-b}{r_a} = r \rightarrow \boxed{-b = r_a} \quad C = \Delta \quad \frac{r_a c - b^r}{r_a} = 9 \rightarrow \frac{r_a \cdot a - 19a^r}{r_a} = 9 \rightarrow \Delta - r_a = 9 \rightarrow \boxed{a = -1} \rightarrow \boxed{b = r}$$

$$\rightarrow -x^r + r_x + \Delta = 0 \rightarrow (x - \Delta)(x + 1) \quad \frac{-1}{-1} \rightarrow (-1, \Delta)$$

$$\frac{S}{p} = ? \rightarrow \frac{\frac{v}{\alpha}}{\frac{9\beta}{\alpha}} = \frac{v}{9\beta} \quad \frac{9\beta}{\alpha} = \alpha\beta \rightarrow \alpha = \pm r / \frac{v}{\alpha} = \alpha + \beta$$

$$\begin{matrix} \alpha = r \\ \alpha = -r \end{matrix} \rightarrow \frac{v - 9}{r} = \frac{-r}{r} = \beta \quad \checkmark$$

$$\frac{-v + 9}{r} = \frac{r}{r} = \beta \quad \checkmark$$

$$\rightarrow \left(\frac{v}{9}\right) \text{ جواب}$$

$$S = \alpha + \beta = ? \quad rm - m\alpha - m\beta = \lambda \rightarrow rm - m(S) = \lambda \rightarrow m(r - S) = \lambda \rightarrow \left(\frac{\lambda}{m} - r\right)(-1) = r - \frac{\lambda}{m} = -m \quad \checkmark$$

$$\rightarrow -m \Rightarrow -m = \frac{rm - \lambda}{m} \rightarrow m^r + rm - \lambda = 0 \rightarrow \frac{(m + r)(m - r)}{-r}, \frac{r}{r} = m \rightarrow \Delta > 0 \rightarrow m^r + \lambda m > 0 \quad \begin{matrix} 0, \Delta \\ + \frac{-\lambda}{-1} + \end{matrix}$$

$$\rightarrow \boxed{m = r} \rightarrow S = \boxed{-r}$$

$$mk^r + rK + \frac{m}{r} + v = 0 \quad \frac{-\Delta}{r_a} = \lambda = \frac{1}{r} \frac{m^r + r\lambda m - \lambda}{r} \rightarrow 19m = m^r + 19m - \lambda \rightarrow m^r - rm - \lambda = 0$$

$$a < 0 \rightarrow m < 0 \rightarrow \boxed{m = -r} \rightarrow -rk^r + rK + 9 = 0 \rightarrow -k^r + rK + r = 0$$

$$\frac{(k - r)(k + 1)}{r} \rightarrow k > 0 \rightarrow \boxed{k = r}$$

$$\frac{-b}{ra} = r \rightarrow -b = ra / \frac{ra - b^r}{ra} = r \rightarrow \frac{ra - 19a^r}{ra} = r \rightarrow r - ra = r \rightarrow \boxed{a = -\frac{1}{r}} \rightarrow \boxed{b = r}$$

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$$\rightarrow -x^r + rx + \lambda = 0 \rightarrow \frac{\text{مجموع الجذور}}{\text{ضرب الجذور}} = \frac{1}{\alpha} + \frac{1}{\beta} = \frac{S}{P} = \frac{r}{-\lambda} = \left(-\frac{1}{r} \right)$$

$$r - \lambda a - \lambda + ra^r + ra + r = ra^r - ra - 1 = 0 \rightarrow a = 1 \quad x^r - \lambda x + r = 0 \rightarrow (x - r)(x - 1)$$

1.

$$\frac{a = -\frac{1}{r}}{x^r - \frac{-r + r}{r} + \frac{1}{r} + r - r}$$

$$a^r - ra - r$$

$$(x - r)(x - 1)$$

$$= x^r - \frac{\lambda}{r} + \frac{r}{r} = 0 \rightarrow rx^r - \lambda + r = 0$$

$$\textcircled{1} = \frac{r}{r} \quad \textcircled{-\frac{1}{r}}$$

$$\rightarrow x^r - \lambda + r = 0 \rightarrow \left(\frac{\lambda}{r} \right) \quad \frac{\lambda}{r} = r$$

$$\Rightarrow \left. \begin{array}{l} x = r \\ x = \frac{\lambda}{r} \end{array} \right\} \begin{array}{l} \checkmark \\ \checkmark \end{array}$$