یازدهم تجربی B ۲۵ آفرین! پرهام منتظری

۱- (۲)

$y = -x^2 + bx + 3$

$-\frac{\Delta}{4a} = 7$

$\frac{b^2+12}{4} = 7$ $b^2+12 = 28$

$b^2 = 16$ $b = \pm 4$

۲- (۲)

$\Delta < 0$ ← جواب ندارد

$f(x) = x^4 + 2x^2 + 3 \xrightarrow{x^2 = t} t^2 + 2t + 3 = 0$ $4 - 12 < 0$

$f(x) = (4-x^2)^2 - 2(4-x^2) - 15 \xrightarrow{(4-x^2)=t} t^2 - 2t - 15 = 0$

$\frac{2 \pm \sqrt{4+60}}{2}$ → 5 , -3

$4 - x^2 = 5$ $-1 = x^2$ غ ق ق

$4 - x^2 = -3$ $x^2 = 7$ $x = \pm\sqrt{7}$

۳- (۲)

$4x^2 - 16x + m = 0$

$\alpha, \alpha+2 \Rightarrow 2\alpha + 2 = \frac{16}{4}$

$2a + 2 = 4$

$2a = 2$

$a = 1$

$1, 3$

$m = 12$

$(x-1)(x-3)$

$4(x^2 - 4x + 3)$

$4x^2 - 16x + 12$

۴- (۲)

$3x^2 - 6x + m - 1 = 0$

$\begin{cases} 2\alpha - \beta = 4 \\ \alpha + \beta = 2 \end{cases}$ $\frac{6}{3} = 2$

$3a = 6 \Rightarrow a = 2$ $\beta = 0$

$3(x(x-2)) = 3x^2 - 6x$

$m = 1$

۵- (۲)

$-mx^2 + 4x + m^2 - 2 = 0$

$\alpha, \frac{1}{\alpha} =$ $\alpha \times \frac{1}{\alpha} = 1$ $\frac{m^2-2}{-m} = 1$

$m^2 + m - 2 = 0$

$\Delta > 0$

$4m^3 - 4m + 16 > 0$

$m^2 - m + 4 > 0$

1 ق ق

-2 غ ق ق

۶- (۲)

$x^2 - mx + 3 = 0$

$\alpha\beta^2 = 4$ $\alpha\beta = 3$

$\alpha\beta(\beta) = 4 \Rightarrow \beta = \frac{4}{3}$ $\alpha \cdot \frac{4}{3} = 3$

$\alpha = \frac{9}{4}$

$\frac{9}{4} + \frac{4}{3} = m$

$\frac{27+16}{12} = \frac{43}{12}$

$x^2 - 4x + m = 0$

$r\alpha, \alpha$

$r, 1$

$r\alpha + \alpha = 4\alpha$

$\frac{4^2}{1} = 4$

(۲) -۷

$\alpha \times r\alpha = r\alpha^2 = r$

$m = r$ ✓

$4\alpha = 4 \quad \alpha = 1$

$x^2 - 7x + 12 = 0$

$\alpha^3 + \frac{\Lambda}{\alpha^3}$

$\alpha\beta = r$

$\beta = \frac{r}{\alpha} \Rightarrow \beta^3 = \frac{\Lambda}{\alpha^3}$

(۲) -۸

$\alpha^3 \neq \beta^3$

$5^3 - 3 \times 5 \times 6$

$125 - 90 = 35$ ✓

$h(t) = -10t^2 + 50t$

$\frac{-20 \times 2}{-40} = \frac{20}{4} = 5$ ✓

(۲) -۹

$-10t^2 + 50t = 0$

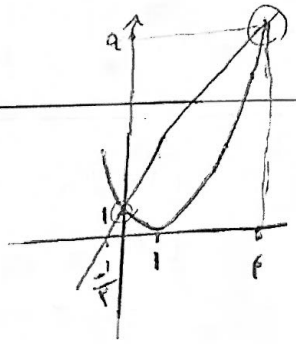
$t = 5$ ✓

$-t^2 + 5t = 0$

$t(-t+5) = 0$

$t = 0$ ✓ $\quad t = 5$

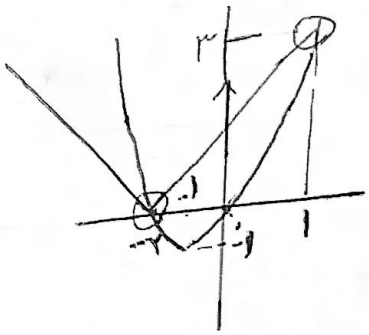
$(x-1)^2 = 2x + 1$



✓

(۲) -۱۰

$x^2 + 2x = |x+2|$



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