

نام و نام خانوادگی فرکانس پهنای باند پاسخنامه تشریحی تکلیف شماره ۱۳۰۰ کلاس ۱۳۰۰ پهنای باند A

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

$$-\frac{\Delta}{4a} = V \rightarrow \frac{-b^2 - 12}{-4} = V \rightarrow b^2 + 12 = 28 \rightarrow b^2 = 16 \rightarrow b = \pm 4$$

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$$a^2 + 2ax + 3 = 0 \xrightarrow{a^2 = t} t^2 + 2t + 3 = 0 \xrightarrow{\Delta < 0} \text{ریشه ندارد}$$

$$-1) f(x) = (4 - x^2)^2 - 2(4 - x^2) - 15 \xrightarrow{4 - x^2 = t} t^2 - 2t - 15 = 0 \rightarrow (t - 5)(t + 3) = 0$$

$$\rightarrow 4 - x^2 = 5 \rightarrow x^2 = -1 \rightarrow \text{خ}$$

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

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$$4x^2 - 14x + m = 0$$

$$\alpha, \beta \rightarrow \alpha, \alpha + 2$$

$$S = 4 \rightarrow \alpha + \alpha + 2 = 4 \rightarrow \alpha = 1 \rightarrow \boxed{\alpha = 1}, \boxed{\beta = 3}$$

$$P = \frac{m}{2} = 1 \times 2 \rightarrow \boxed{m = 12}$$

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$$-3x^2 - 4x + m - 1 = 0 \quad 2\alpha - \beta = 4$$

$$2\alpha - \beta = 4 \rightarrow \frac{1}{4}(\alpha + \beta) + \frac{3}{4}(\alpha - \beta) = 4 \rightarrow \alpha + \beta = 2$$

$$\rightarrow \frac{3}{4}(\alpha - \beta) = 3 \rightarrow \alpha - \beta = 4, \alpha + \beta = 2 \rightarrow \underline{\underline{\beta = 0, \alpha = 2}}$$

$$\rightarrow P = 0 \rightarrow \boxed{m = 1}$$

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$$-mx^2 + 7x + m^2 - 2 = 0$$

$$\alpha, \frac{1}{\alpha} \rightarrow P = 1$$

$$\rightarrow \frac{m^2 - 2}{-m} < 1 \rightarrow m^2 + m - 2 = 0 \rightarrow (m + 2)(m - 1) = 0 \rightarrow \underline{\underline{m = 1, -2}} \quad 5$$

$$\xrightarrow{m = -2} 2m^2 + 7m + 2 \rightarrow \Delta < 0 \quad \text{خ}$$

$$\xrightarrow{m = 1} x^2 + 7x + 1 \rightarrow \Delta > 0 \quad \checkmark \rightarrow \boxed{m = 1}$$

$$2x^r - mx + r = 0$$

$$\alpha\beta = r$$

$$\alpha\beta^r = r \rightarrow r(\beta) = r \rightarrow \beta = \frac{r}{\alpha}$$

$$\xrightarrow{m=\beta} \frac{14}{9} - m\left(\frac{r}{r}\right) + r = 0 \rightarrow \frac{14}{9} - \frac{1r}{9}m + \frac{rv}{9} = 0 \rightarrow \frac{r}{9} \cdot \frac{1r}{9}m \rightarrow \frac{r^2}{18} = m$$

$$m^r - fm + m = 0$$

$$\alpha, r\alpha$$

$$S = f$$

$$\alpha + r\alpha < f \rightarrow \alpha < 1, r\alpha < f \rightarrow p < r$$

$$\rightarrow \frac{m}{1} < r \rightarrow \boxed{m = r}$$

$$2x^r - vm + r = 0$$

$$\alpha^r + \frac{1}{\alpha^r} = ?$$

$$p = r \rightarrow \alpha, \beta \rightarrow \beta = \frac{r}{\alpha}$$

$$\rightarrow \frac{1}{\alpha^r} = \left(\frac{r}{\alpha}\right)^r, \beta^r$$

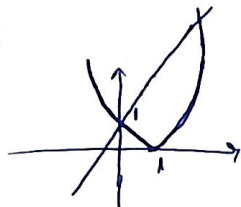
$$\rightarrow \alpha^r + \frac{1}{\alpha^r} = \alpha^r + \beta^r, S^r - rSp = (U)^r - fr = \boxed{r \cdot 1}$$

$$h(t) = -1 \cdot t^r + \omega \cdot t$$

$$ent^{\frac{r}{\alpha}} = \frac{b}{r\alpha} < \frac{-\partial}{-r} = r, \partial \rightarrow ent^{\frac{r}{\alpha}} = -1 \cdot (r, \partial)^r + \omega \cdot (r, \partial) \in \{4r, \omega\}$$

$$-1 \cdot t^r + \omega \cdot t = 0 \rightarrow -t^r + \omega t = 0 \rightarrow -t(t - \omega) = 0 \rightarrow t = 0, \omega \rightarrow \boxed{t = \omega S}$$

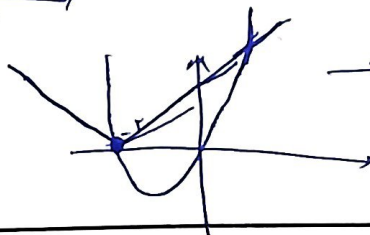
$$\text{الف) } (n-1)^r \geq rm + 1$$



$$n \geq 0, n < f$$

$$p_{-}, r$$

$$\rightarrow) \leq n^r + rm \leq (n+r)$$



$$\rightarrow \{n \geq 1, \text{ and } n \geq -r\}$$

$$p_{-}, r$$