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نام و نام خانوادگی: عرفان حسین پاسخنامه تشریحی تکلیف شماره ۲۲ کلاس A

$$\text{ex4} \left| \begin{array}{l} h \\ k \end{array} \right. a(n-h)^r + k$$

$$19a = -1 \Rightarrow a = -\frac{1}{19}$$

$$a(n+1)^r + 9 \rightarrow 19a + 9 = 1$$

$$\frac{-(n+1)^r}{19} + 9 = \frac{-n^r}{19} - n + \frac{14}{19} \checkmark$$

$$\Delta > 0 \quad \frac{m+9}{r} > 0 \Rightarrow m > -9 \Rightarrow (-9, -1) \checkmark$$

$$\delta > 0 \quad \frac{m}{r} > 0 \Rightarrow m > 0$$

$$m^r - r(rm + 1r) > 0 \Rightarrow m^r - 12m - 1 > 0$$

$$(m - 12)(m + 1)$$

$$\delta = \frac{1}{p} \quad \frac{1-rm}{r} = \frac{r}{r-m} \Rightarrow 9 = r - m - (rm + 1m^r)$$

$$\Delta > 0 \quad rm^r - 2m - 1 = 0$$

$$\Rightarrow m^r - 2m' - 1 = 0 \quad m = \frac{r}{r}$$

$$(m' - 1)(m' + 1) \Rightarrow m = -1$$

For $m = -1$

$$rm^r - rm + 1 \Rightarrow \Delta = 9 - (19) = -10 \quad \text{For } m = \frac{r}{r}$$

$$rm^r + 9m - \frac{1}{r} \Rightarrow \Delta = 99 \Rightarrow m = \frac{r}{r} \checkmark$$

$$\delta = n_1^r + n_2^r + \frac{1}{n_1} + \frac{1}{n_2} = (n_1 + n_2)(n_1^r - n_1 n_2 + n_2^r) + \frac{n_1 + n_2}{n_1 n_2}$$

$$\delta = 1, p = -r \Rightarrow 1 \left((1)^r - \frac{r}{n_1 n_2} + 1 \right) + \frac{1}{-r}$$

$$= 11, 10 \text{ (I)}$$

$$p = \left(n_1^r + \frac{1}{n_2} \right) \left(n_2^r + \frac{1}{n_1} \right) = n_1^r n_2^r + n_1^r + n_2^r + \frac{1}{n_1 n_2}$$

$$= -9r + 9 - \frac{1}{r} = -22, 10 \text{ (II)} \Rightarrow n^r - 12n - 22, 10$$

$$a = \sqrt[r]{n}, b = \frac{1}{\sqrt[r]{n}} \quad \left(\sqrt[r]{n^r} + \frac{1}{\sqrt[r]{n^r}} + 1 \right) \left(\frac{\sqrt[r]{n^r} - 1}{\sqrt[r]{n}} \right) = 1$$

$$= a^r - b^r = n - \frac{1}{n} = 1 \Rightarrow n^r - 12n - 1$$

$$\Rightarrow \delta = -\frac{(-1)}{1} \text{ (I)} \checkmark$$

$$rm - 22, 10$$

$$\alpha = \sqrt{3}\beta \Rightarrow \underbrace{\alpha + \beta}_{\delta} = \sqrt{3}\beta, \underbrace{\alpha\beta}_{\rho} = \sqrt{3}\beta^2 \quad \text{اختلاف} = \boxed{14}$$

$$\frac{a}{\sqrt{3}} = \sqrt{3}\beta \Rightarrow a = 12\beta \quad \textcircled{I} \rightarrow a = 12 \times \frac{\sqrt{3}}{\sqrt{3}} = 12 \quad \textcircled{1} \quad a = 12 \times \frac{\sqrt{3}}{\sqrt{3}} = 12 \quad \textcircled{-1}$$

$$\frac{\sqrt{3}}{\sqrt{3}} = \sqrt{3}\beta^2 \Rightarrow \sqrt{3} = 9\beta^2 \Rightarrow \beta^2 = \frac{\sqrt{3}}{9} \Rightarrow \beta = \pm \frac{\sqrt{3}}{3} \quad \textcircled{I}$$

"جواب در صفحه شماره ۳"

$$\frac{-a}{\sqrt{3}} = \frac{-(-2)}{-\sqrt{3}} = -1 \Rightarrow -a = -2 \Rightarrow a = 2$$

$$n^2 + 2m - 2 = 1 \Rightarrow n^2 + 2m - 3 = 0 \Rightarrow (n+1)(n-1) = 0$$

$$-1 - 2 + b = 1 \Rightarrow b = 4 \quad ab = 2 \times 4 = 8 \quad \checkmark$$

$$\delta = \delta' + 1, \rho = (n_1 + \frac{1}{\sqrt{3}})(m_1 + \frac{1}{\sqrt{3}}) = \rho' + \frac{1}{\sqrt{3}} + \frac{\delta'}{\sqrt{3}}$$

$$\frac{-a}{\sqrt{3}} + 1 = \frac{-a+2}{\sqrt{3}} = \frac{a}{\sqrt{3}} \Rightarrow a = 1 \quad \left| -3 + \frac{1}{\sqrt{3}} + \frac{1}{\sqrt{3}} = -3 \right.$$

$$\frac{b}{\sqrt{3}} = -3 \Rightarrow b = -9 \quad \left[\frac{-9}{\sqrt{3}} \right] = -3 \quad \checkmark$$

$$n^2 + 9m = -m \Rightarrow n^2 + 10m = 0$$

$$x - \sqrt{3} = -\sqrt{3}n^2 = 10m = 10m \Rightarrow n^2 + 10m = -\sqrt{3}n^2 = 10m$$

$$\sqrt{3}n^2 + 10m = 0 \Rightarrow n(n+5) = 0$$

$$10 = 10 - 10m = 0 \Rightarrow m = 0$$

$$\Rightarrow R = 0 \Rightarrow \textcircled{X}$$

$$10 = 10 - 10m = 0 \Rightarrow m = 0$$

$$R = -5 \Rightarrow \textcircled{X}$$

$$\Rightarrow \delta_1 = -9 = -5 + n_2 \Rightarrow n_2 = -4$$

$$\delta_2 = -2 = -5 + n'_2 \Rightarrow n'_2 = 3$$

$$\sqrt{3}(-1) = \sqrt{3} \quad \checkmark$$

اختلاف یعنی قدر مطلق
(همواره مثبت)

$$\sqrt{3}(-1) = \sqrt{3}$$

$$\sqrt{3}(3) = \sqrt{3}$$

✓

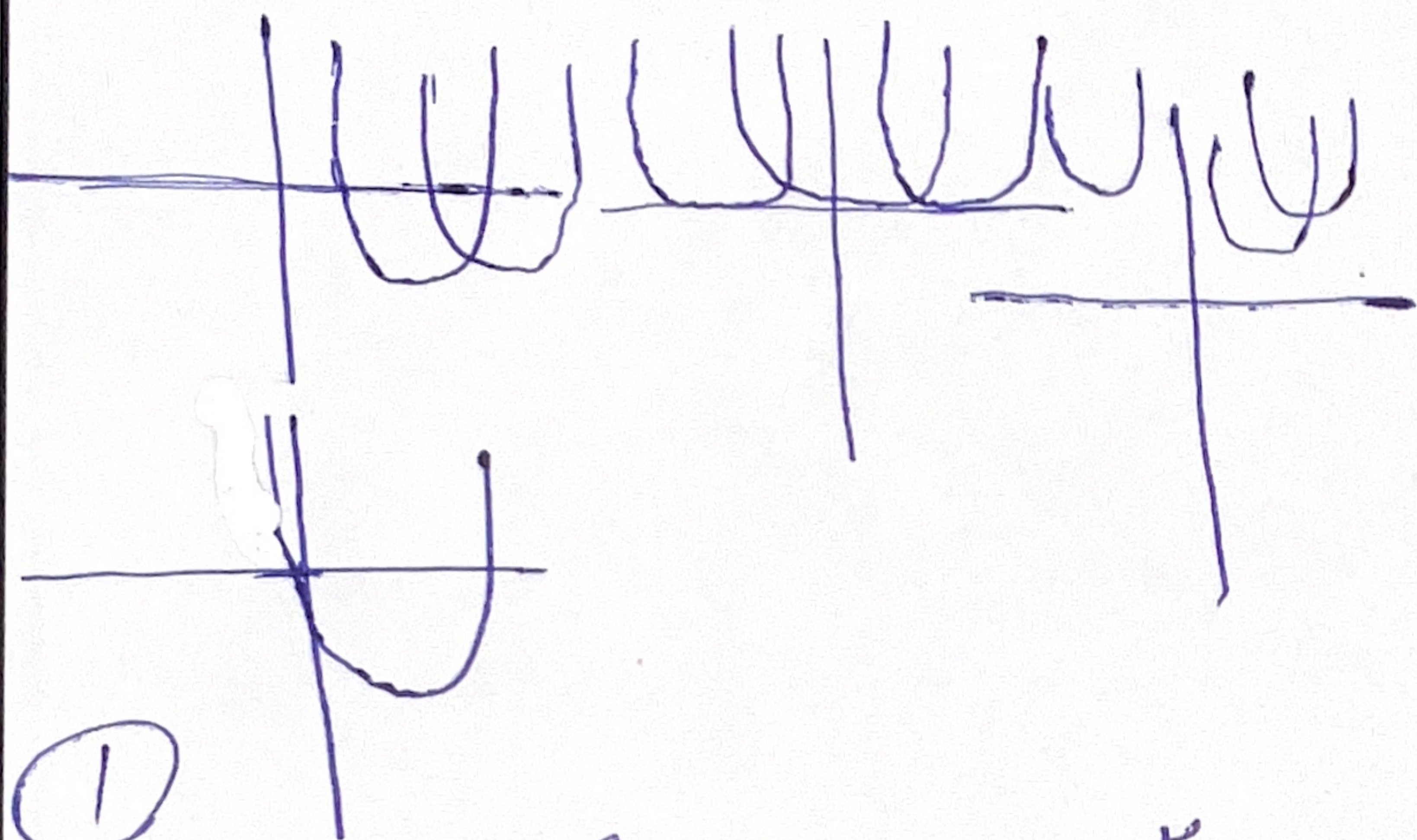
در ابروی ششم Δ, a, P, δ

$a > 0$

① $\Delta > 0$
 $2R_{0.4} \delta$

② $\Delta = 0$
 $1R_{0.4}$

③ $\Delta < 0$
 $1R_{0.4}$



① $\Delta > 0 \Rightarrow \begin{cases} 9 + 12a + 4a^2 - 4a > 0 \\ 4a^2 + 12a + 9 > 0 \\ -12 - 4a > 0 \end{cases} \Rightarrow \begin{cases} \text{همواره مثبت} \\ \text{همواره مثبت} \\ -4a > 12 \Rightarrow a < -\frac{3}{1} \Rightarrow a < 0 \end{cases}$

$P = 0 \Rightarrow \text{X}$

② $\Delta = 0 \Rightarrow 4a^2 + 12a + 9 = 0 \Rightarrow \text{X}$

③ $\Delta < 0 \Rightarrow 4a^2 + 12a + 9 < 0 \Rightarrow \text{همراه مثبت نیست} \Rightarrow \text{X}$

اگر a هم برابر باشد همراه مثبت نیست بوده و از ناحیه سوم می گذرد
اگر هم a منفی باشد که خوب است و واضح است که از ناحیه سوم و چهارم
می گذرد پس در ازای هیچ مقداری از a این تابع رانسی توان گای ندارد

که از ناحیه سوم نگذرد پس ✓