

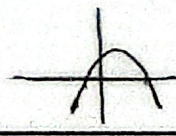
نام و نام خانوادگی: ... پاسخنامه تشریحی تکلیف شماره ۱۳ کلاس ...

$y_2 (a-1)n^2 + n + 3$ $n = 2 \Rightarrow -\frac{b}{2a} = 2 \Rightarrow \frac{-1}{2a-2} = 2$
 $\varepsilon a - \varepsilon z - 1 \Rightarrow \varepsilon a = 2 \Rightarrow a = \frac{2}{\varepsilon}$
 $y = -\frac{1}{\varepsilon} n^2 + n + 3 \Rightarrow n = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \Rightarrow \frac{-1 \pm \sqrt{1+3}}{-\frac{1}{\varepsilon}}$

$f(n) = mn^2 - \Delta n + m$ $\Delta > 0 \Rightarrow 4\omega - \varepsilon m^2 > 0 \Rightarrow 4\omega > \varepsilon m^2 \Rightarrow m < \frac{2\omega}{\varepsilon}$
 $a < 0 \Rightarrow m < 0$ (۱)
 $-\frac{\omega}{\varepsilon} < m < \frac{2\omega}{\varepsilon}$ (۲)
 $\textcircled{1} \cap \textcircled{2} \Rightarrow 1 - \frac{\omega}{\varepsilon} < m < 0$

$S = \frac{4-\sqrt{5}}{3} + \frac{4+\sqrt{5}}{3} = \frac{8}{3}$ $n^2 - 5n + 6 = 0$
 $P = \left(\frac{4-\sqrt{5}}{3}\right)\left(\frac{4+\sqrt{5}}{3}\right) = \frac{4-5}{9} = -\frac{1}{9}$ $\Rightarrow n^2 - 2n + \frac{4}{9} = 0$
 $4n^2 - 18n + 4 = 0$

$2n^2 - 18n + m + 4 = 0$ $\alpha < \beta$ $\Rightarrow 2(5-2p) + 5\left(\frac{4\sqrt{\Delta}}{|a|}\right)$
 $\Rightarrow 10 - 4p + 5\left(\frac{4\sqrt{48-14m-14}}{2}\right) = 12$
 $\Rightarrow 10 - 4p + 10\sqrt{12-3.5m-3.5} = 12$
 $\Rightarrow 10 - 4p + 10\sqrt{12-3.5m-3.5} = 12$

$y = a(n-2)^2 + 4$ $\Rightarrow (n^2 - \varepsilon a - \omega) > 0 \Rightarrow -(n-\omega)(n+1) > 0$
 $n < \omega$ $n > -1$


$$\alpha n^2 - \nu n + 4\beta = 0$$

$$\beta > 0 \Rightarrow \frac{4\beta}{\alpha} \geq \alpha\beta \Rightarrow 4 \geq \alpha^2 \Rightarrow \alpha = \pm 2$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = 2$$

$$\Rightarrow \alpha\beta^2 - \nu\beta + 4\beta = 0 \Rightarrow \beta(\alpha\beta + 4) = 0 \Rightarrow \alpha\beta = -4$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = -\frac{1}{\nu} + \frac{\nu}{4} = -\frac{\nu+4}{4} \Rightarrow \left(\frac{\nu}{4}\right)$$

(5)

$$n^2 + m - \nu m = 0 \Rightarrow \beta^2 + m\beta - \nu m = 0 \Rightarrow \beta^2 - \nu m - \beta m = 0 \quad (1)$$

$$\alpha^2 - m\beta = 1 \Rightarrow \alpha^2 + \beta^2 - \nu m = 1 \Rightarrow m^2 + \nu m - \nu m - 1 = 0 \Rightarrow m^2 + \nu m - 1 = 0$$

$$n^2 - \nu n + 1 = 0 \Rightarrow \Delta > 0 \text{ for } \nu > 2$$

$$m^2 + \nu m - 1 = 0 \Rightarrow S = -\frac{b}{a} = -\nu$$

$$(m+1)(m-1) = 0 \Rightarrow m = -1 \text{ or } m = 1$$

(5)

$$f(m) = m n^2 + \nu n + \frac{m}{\nu} + \nu \Rightarrow -\frac{\Delta}{\epsilon a} = 1 \Rightarrow \frac{14 - \nu m^2 - \nu \Lambda m + \nu m}{\epsilon m} = 0$$

$$\frac{-(m-1)(m+1)}{-m^2 + \nu m + 1} = 0 \Rightarrow m^2 - \nu m - 1 = 0 \Rightarrow \Delta > 0 \text{ for } \nu > 2$$

$$n^2 - \nu n - 1 = 0 \Rightarrow (n-1)(n+1) = 0 \Rightarrow n = 1 \text{ or } n = -1$$

$$K = 13 \text{ for } \nu = 13$$

$$y = a(n - 4)^2 + 4 \Rightarrow \epsilon a + 4 = 4 \Rightarrow a = -\frac{1}{\nu}$$

$$\Rightarrow y = -\frac{1}{\nu} n^2 - \nu n + 4 = -\frac{1}{\nu} n^2 + \nu n + 4 \Rightarrow -\frac{1}{\nu} n^2 + \nu n + 4 = 0$$

$$\Rightarrow n^2 - \nu n - 1 = 0 \Rightarrow \frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta} = \frac{5}{\nu} = \frac{\nu}{-1} \Rightarrow \left(\frac{1}{\nu}\right)$$

$$n^2 - (\epsilon a + \epsilon) n + (\nu a^2 + 4a + \nu) = 0 \Rightarrow n^2 - \epsilon(a+1) n + \nu(a+1)^2 = 0$$

$$\epsilon - \Lambda(a+1) + \nu(a+1)^2 = 0 \Rightarrow \nu\epsilon^2 - \Lambda\epsilon + \epsilon = 0 \Rightarrow \epsilon(\nu\epsilon - \Lambda + 1) = 0$$

$$n^2 - \Lambda n + 1 = 0 \Rightarrow \Delta > 0 \Rightarrow (n-1)(n-1) = 0 \Rightarrow n = 1$$

$$n^2 - \frac{\Lambda}{\nu} n + \frac{\epsilon}{\nu} = 0 \Rightarrow \Delta > 0 \Rightarrow \nu n^2 - \Lambda n + \epsilon = 0 \Rightarrow n = \frac{\nu}{\Lambda}$$