

الف) $y^3 - 2m^2 + m - 1$ $y^3 - 2m^2 + m - 1$ $y^3 - 2m^2 + m - 1$ $y^3 - 2m^2 + m - 1$ $\rightarrow y_1, y_2$ ج) $\frac{n+y}{r} \sqrt{ny}$ $n, y > 0$ $n+y \geq r\sqrt{ny}$ د) $n y^2 + 2m - y^3 - 2y_2$ $n(y^2 + r) - y(y^2 + r) = 0$ ه) $n^2 + y^2 - 2ny \geq 0 \rightarrow (n-y)^2 \geq 0$	ب) $\frac{\pi}{r} C_{12} y_1 y_2 C_{12} \frac{\pi}{r} \rightarrow \frac{\pi}{r} C_{12} y_1 y_2$ د) $n y^2 + 2m - y^3 - 2y_2$ $n(y^2 + r) - y(y^2 + r) = 0$ ه) $(y^2 + r)(n - y) = 0 \rightarrow n = y$	۱
الف) $y + n^2 y$ $n+1$ $y - ry = -1$ $y = 1$ ب) $y - ry = -1 \rightarrow y = \frac{1}{1-r}$ ج) $-y - ry = -1 \rightarrow y = \frac{1}{1+r}$	ب) $[y] + [n] = 1$ د) $[y] = 1 \rightarrow y = [1, 2)$	۲
الف) $f(n) = \begin{cases} r n^2 - b n-1 \geq r \rightarrow n-1 \geq r \rightarrow n \geq r+1 \\ n-1 \leq -r \rightarrow n \leq -1 \end{cases}$ ب) $a + r n = r x \leq r \Rightarrow n \leq r$ ج) $r(a) - b \geq a + r(r)$ د) $r - b \geq a + r \rightarrow a + b \leq 1r$	ب) $(S_2 - \frac{b}{a}) S_2 = a + b + \frac{+b}{-1} = -b$ د) $(P_2 \frac{c}{a}) P_2 = a \cdot b = \frac{a}{-1} = -a$ ه) $a + b = r + (-1) = 1$	۳
$\sqrt{a - bx - nx^2} \geq -x^2 - bx + a$ $f: [b, a]$ ب) $a + b = -b \rightarrow a = -2b \rightarrow a = -2(-1) = 2$ د) $a + b = -b \rightarrow (b-1)$	ب) $a + b = r + (-1) = 1$	۴
$ax^2 + bx + c > 0$ ب) $rb + c = 0$ ج) $c = -rb$ د) $a + c - c/b = ?$ ه) $b = 0$	ب) $a + c - c/b = ?$ د) $b = 0$	۵

$$y = \sqrt{\frac{cn+r}{n+b}} > 0 \rightarrow \sqrt{\frac{r(n+1) + an + ab}{n+b}} > 0$$

$r = \text{مخرج}$ ← $D_f: (r, +\infty)$

$\rightarrow r+b=0 \rightarrow b=-r$

ا) $y = \sqrt{n^2 - m} > 0$

ب) $y = \frac{1}{\sqrt{|n|-1}} > 0$ $|n| > 1$

$\sqrt{n(n-1)(n+1)} > 0$

$\begin{cases} n > 1 \rightarrow D_f: (-\infty, -1) \cup (1, +\infty) \\ n < -1 \end{cases}$

$D_f: [-1, 0] \cup [1, +\infty)$

ا) $y = \sqrt{\frac{1}{|n| - [n]}} > 0$ $|n| \neq [n]$ $D_f: \mathbb{R} - \left\{ \frac{1}{2} + k \right\}$

ا) $\sqrt{n+5} = 0 \rightarrow \sqrt{9 - \sqrt{n}} > 0$

$D_f: I \cap II = [0, 4)$

$\left[r_n - \frac{1}{r} \right] + \left[r_n + \frac{1}{r} \right] > 0 \rightarrow \left[r_n - \frac{1}{r} \right] + \left[r_n - \frac{1}{r} + 1 \right] > 0$

$r \left[r_n - \frac{1}{r} \right] + r > 0 \rightarrow \left[r_n - \frac{1}{r} \right] > -1 \rightarrow r_n - \frac{1}{r} \geq 0 \rightarrow n \geq \frac{1}{r}$

$D = \left[\frac{1}{r}, +\infty \right)$

$y = \frac{1}{\sqrt{\left[r_n - \frac{1}{r} \right] + \left[r_n + \frac{1}{r} \right]}} > 0$ $\left[r_n - \frac{1}{r} \right] + \left[r_n + \frac{1}{r} \right] + 1 > 0 \rightarrow \left[r_n + \frac{1}{r} \right] > 0 \rightarrow \left[r_n + \frac{1}{r} \right] > 0$

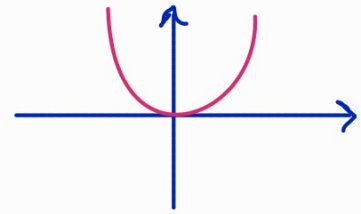
$y = \sqrt{1 - \lg(rn - a)}$ $D_f: (b, c]$

$\begin{cases} rn - a > 0 \\ 1 \geq \lg(rn - a) \end{cases}$ $D_f: I \cap II$

$1 \geq \lg(rn - a) \rightarrow 1 \geq rn - a$

۲- طرف چپ تساوی همواره مثبت است پس طرف راست هم باید مثبت باشد: $y > 0$

$$|y| + x^2 = 2y \xrightarrow{y > 0} y = x^2$$



تابع
کعبه