

الف) $y^3 - 2m^2 + m - 1$ $y^3 - 2m^2 + m - 1$ $y^3 - 2m^2 + m - 1$ $y^3 - 2m^2 + m - 1$ ج) $\frac{n+y}{r} \sqrt{ny}$ $n, y > 0$ $n+y \geq r\sqrt{ny}$ د) $\frac{n+y}{r} \sqrt{ny}$ $n, y > 0$ $n+y \geq r\sqrt{ny}$	ب) $\frac{n+y}{r} \sqrt{ny}$ $n, y > 0$ $n+y \geq r\sqrt{ny}$ د) $\frac{n+y}{r} \sqrt{ny}$ $n, y > 0$ $n+y \geq r\sqrt{ny}$	۱
الف) $y + n^2 y$ $n+1$ $y - ry = -1$ ب) $y - ry = -1$ $y - ry = -1$	ب) $[y] + [n] = 1$ $n \geq 1$ $[y] = 1 \rightarrow y = [1, 2]$	۲
$f(n) = \begin{cases} r n^2 - b n-1 \geq r \Rightarrow n-1 \geq r \Rightarrow n \geq r+1 \\ n-1 \leq -r \Rightarrow n \leq -1 \end{cases}$ $a+rn = r \Rightarrow n = \frac{r-a}{r}$	$r(a) - b \geq a + r(r)$ $r - b \geq a + r \Rightarrow a + b \leq 1r$	۳
$\sqrt{a-bx-nx^2} \geq -x^2-bx+a$ $\frac{n}{-1} \frac{b}{+1} \frac{a}{-1}$ $D: [b, a]$	$(S = \frac{b}{a})$ $S = a+b = \frac{+b}{-1} = -b$ $(P = \frac{c}{a})$ $P = a.b = \frac{a}{-1} = -a$ $a+b = -b \rightarrow a = -b \rightarrow a = -(-1) = 1$	۴
$an^2 + bn + c > 0$ $rb + c = 0$	$a = 0$ $b < 0$ $c = -rb$ $a + c - c/b = ?$ $b = 0$	۵

$$y = \sqrt{\frac{cm+r}{n+b}} > 0 \rightarrow \sqrt{\frac{rm+r+am+ab}{n+b}} > 0$$

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

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

انت $y = \sqrt{n^2-m} > 0$

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

$\downarrow \quad \downarrow \quad \downarrow$
 $1 \quad 1 \quad -1$

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

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

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

الف) $y = \sqrt{\frac{1}{|n|-[n]}} > 0$ $|n| \neq [n]$ $D_f: \mathbb{R} - \{\pm 1, 0\}$

$\begin{cases} +2 \rightarrow 1-1=0 \times \\ 2 \rightarrow 1-1=0 \times \\ 0 \rightarrow 1-1=0 \times \end{cases} \rightarrow \begin{cases} 1-1=0 \times \\ 1-1=0 \times \\ 1-1=0 \times \end{cases}$

$(12-2)^+ \rightarrow \checkmark$
 $(12-2)^- \rightarrow \checkmark$

ب) $\sqrt{n} + \sqrt{y} = 9$ $\rightarrow \sqrt{y} = 9 - \sqrt{n}$

$n \geq 0$ I
 $4 - \sqrt{n} \geq 0 \rightarrow 9 \geq \sqrt{n} \rightarrow 81 \geq n$ II

$D_f: I \cap II = [0, 81]$

$y = \frac{1}{\sqrt{[rm-\frac{1}{r}] + [rm+\frac{1}{r}]}} > 0$

$\frac{1}{r} + \frac{1}{r}$

$D_f: (-\frac{1}{2}, +\infty)$ $n > -\frac{1}{2}$

$\rightarrow [rm+\frac{1}{r}] > 0 \rightarrow [rm+\frac{1}{r}] > 0$

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

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

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

$\begin{cases} c \leq \omega + \frac{a}{r} \\ b \geq \frac{a}{r} \end{cases}$

$\omega + \frac{a}{r} \geq n \geq \frac{a}{r}$