

(الف) $\frac{n+r}{(n+r)(n-1)(n-1)} \rightarrow D_f = \mathbb{R} - \left\{ -\frac{1}{2}, 1, \frac{1}{2} \right\}$ (1)

$\Rightarrow \frac{n+r}{(n+1)(n+1)(n+1)} \rightarrow D_f = \mathbb{R} - \left\{ -\frac{1}{2}, -1, -\frac{1}{2} \right\}$

(ب) $\frac{n+r}{(n^2-n+1)(n-1)} \rightarrow D_f = \mathbb{R} - \{1\}$ (2)

$\Rightarrow \frac{n+r}{n-1} \geq \frac{-r}{+1} \rightarrow D_f = \mathbb{R} - (-1, 1]$

$y = \frac{r}{|x-1|^2 - 8|x-1| + 15} \rightarrow |x-1| = t \quad t^2 - 8t + 15 \neq 0 \rightarrow \begin{cases} t \neq 1 \\ t \neq 3 \end{cases}$ (3)

$D_f = \mathbb{R} - \{1, 3\}$
 $|x-1| \neq 1 \rightarrow x \neq 2, 0$
 $|x-1| \neq 3 \rightarrow x \neq 4, -2$
 $D_f = \mathbb{R} - \{1, 3, 2, 0, 4, -2\}$

(ج) $|r_{n+1}| = |n+r| \rightarrow r_{n+1} = n+r \rightarrow n \geq r$ (4)
 $r_{n+1} = -n-r \rightarrow r_n = -1 \rightarrow n \leq -\frac{1}{r}$

$D_f = \mathbb{R} - \left\{ -\frac{1}{r}, 2, r \right\}$ (5)

$\Rightarrow |r_{n+1}| \geq |n+r| \rightarrow r_{n+1} \geq n+r \rightarrow n \geq r$
 $r_{n+1} \leq -n-r \rightarrow r_n \leq -1 \rightarrow n \leq -\frac{1}{r}$
 $D_f = (-\infty, -\frac{1}{r}] \cup [r, \infty)$

(د) $n \geq 0$
 $1 < \log_n n < 1 < \log_n n < n > n \rightarrow D_f = (0, \infty)$ (6)

$$-1 > n > 0$$

$$Q_x(n, \frac{1}{r})$$

$$1 > \log \frac{n}{r} - \frac{1}{r} > n$$

$$r_{n+1} - n > \frac{1}{r}$$

$$\log_{\frac{1}{r}}^{r_{n+1}} > 0 \rightarrow r_{n+1} - n > \frac{1}{r}$$

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$$Q_f = [r_2, +\infty) \quad D_f = (1, r]$$

$$2) \log(r_{n+1}) - r_{n+1} > 0 \rightarrow \log > -\frac{1}{r}$$

$$D_f = \mathbb{R} - \left[\frac{rK\pi}{r} - \frac{\pi}{r} \leq \frac{rK\pi}{r} + \frac{\pi}{r} \right]$$

$$\rightarrow n > 1, n < -1$$

$$\rightarrow \frac{n-1}{n+1} > 0 \rightarrow n > 1 \quad \log \frac{n-1}{n+1} > 0 \rightarrow n > 1$$

$$D_f = [1, +\infty) \quad n < -1$$

$$n \neq -1 \quad D_f = (-\infty, -1)$$

$$(a+r)n^2 + an + b$$

$$(a+r)n^2 + an + b \geq 0$$

$$(-a+r)n^2 = n^2 - 4n + 9 \quad a = -4$$

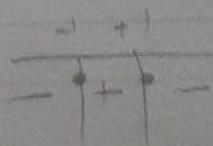
$$a+r=1 \rightarrow a=-1 \quad b=9$$

$$\sqrt{n^2 + r + 1 - m^2} = n^2 + r + 1 - m^2 \geq 0$$

$$F = K(r-m^2) \leq 0$$

$$F = K + m^2 \leq 0 \rightarrow m \geq 1$$

$$D_p = \mathbb{R} \rightarrow 1 \leq m \leq 1 \rightarrow D_f = \{1\}$$



$$1 - (-1) = \frac{r}{r}$$

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$$D_f = [-2, 2] - 1/1$$

هـ

۱، ۲ - ۲ و ۲ ←
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۱۸) دایره تابع $f(x)$ به صورت یک بازه می باشد پس عبارت زیر را بنویس باید به فرم

تابع درجه ۱ باشد پس ضریب d^2 صفر است $a = -2$

$d = 3$ ریشه زیر را بنویس است $b = 4 \rightarrow -4 + b = 0 \rightarrow b = 4$