

[illegible]

(الف) قسم بـ $n-1$ → معضلة صفر → $x^k - k n^{k-1} + k n - 1 = 0 \rightarrow x^k - k n^{k-1} + k n - 1 = 0$

(ب) $\alpha = -3$

$$\frac{x^k - k n^{k-1} + k n - 1}{x - (-3)} = \dots$$

$$(x+3)(n^k - n + 1) + \dots$$

$$D_f = [-\infty, -3] \cup (1, \infty)$$

$n-1 \rightarrow n^V \alpha m + d - \psi m + d = n^V - \psi m + d$
 $\hookrightarrow 1 - \alpha \rightarrow n^V + d m - \psi m + d \rightarrow n^V + \psi m$
 $n^V - d \mid n-1 \mid \psi m + d \neq 0$

$n^V - \psi m + d = 0 \rightarrow \begin{cases} n = d \\ n = \psi \end{cases}$

$n + \psi m = 0 \rightarrow \checkmark n(m + \psi) = 0 \rightarrow \begin{cases} n = 0 \\ n = -\psi \end{cases}$

$D_f = R - f \circ g \circ f - \psi \circ f$

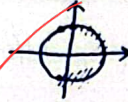
$$|P_{n+1}| - |n+\mu| \neq 0 \rightarrow |P_{n+1}| = |n+\mu| \rightarrow (P_{n+1})^p = (n+\mu)^p \quad (i.e.)$$

$$\rightarrow P_{n+1}^p - P_n - 1 = 0 \rightarrow n^p - P_n - 1 = 0 \rightarrow (n-\mu)(n+\epsilon) = 0 \rightarrow n = \mu \rightarrow n = \mu - \frac{\epsilon}{\mu}$$

$$|P_{n+1}| - |n+\mu| \geq 0 \rightarrow |P_{n+1}| \geq |n+\mu| \rightarrow (P_{n+1})^p \geq (n+\mu)^p \quad (i.e.)$$

$$\rightarrow P_{n+1}^p - P_n - 1 \geq 0 \rightarrow (n-\mu)(n-\frac{\epsilon}{\mu}) \geq 0 \rightarrow n = \mu - \frac{\epsilon}{\mu} \rightarrow n = -\epsilon/\mu \rightarrow \frac{-\epsilon}{\mu} - \frac{\mu}{\mu} = -\frac{\epsilon}{\mu} - 1 \rightarrow (-\infty, -\frac{\epsilon}{\mu}] \cup (1, \infty)$$

$1 - \log_{\frac{1}{p}} n > 0 \rightarrow \log_{\frac{1}{p}} n < 1 \rightarrow n < \frac{1}{p}, n > 0 \rightarrow 1 < n^{\frac{1}{p}}$

$r_{n-1} > 0 \rightarrow n > 1$ $\log \frac{r_{n-1}}{a} > 0 \rightarrow r_{n-1} > 1 \rightarrow r_n > 1 \rightarrow m > 1 \rightarrow n > 1$ $r_{n-1} \leq a \quad n \leq 1$ $n \leq 1$ $D_f = [1, 4]$	6
$r \cos \alpha + 1 > 0 \rightarrow \cos \alpha > -\frac{1}{r}$  $D_f = \left(\pi - \frac{\pi}{r}, \pi + \frac{\pi}{r} \right)$ $1) \frac{n-1}{n+1} > 0 \rightarrow \frac{1}{1-\phi} + \frac{1}{1+\phi} > 0 \rightarrow (-\infty, -1) \cup [1, +\infty)$ $2) \log \frac{n-1}{n+1} > 0 \rightarrow \frac{n-1}{n+1} > 1 \rightarrow \frac{n-1}{n+1} - 1 > 0 \rightarrow \frac{-2}{n+1} > 0 \rightarrow n < -1$	7 → (-∞, -1)
$a + 1 = 0 \rightarrow a = -1 \xrightarrow{\mu} -4 + b = \dots \rightarrow b = 9$	8
$n^2 + (n+1)^2 - m^2 > 0 \rightarrow n^2 + (n+1)^2 + (1-m^2) > 0$ $(n+1)^2 + (1-m)(1+m) > 0 \quad (1-m)(1+m) > 0$ $m = 1, m = -1 \rightarrow 1 - (-1) = 2$	9
$E - m^2 > 0 \rightarrow (r-n)(r+m) > 0 \rightarrow -\frac{r}{2} + \frac{r}{2} = [-\frac{r}{2}, \frac{r}{2}]$ $[n] + [-m] \neq -1 \rightarrow$ بازیهای عدد صحیح مقابل عبارت منفی است نمیباشد از ۱ تا ۲ ۱ و ۲ ۱ و ۲ ۱ و ۲ ۱ و ۲	10