

$\Rightarrow y = \frac{n+1}{n} \quad n \geq -1$
 $y = \sqrt{-n} \quad n < -1$

$f(n-1) = 0 \Rightarrow n = -1, 0, 1$

	-1	0	1	2	3	4	5
n	-	-	-	0	+	+	+
$f(n)$	-	0	+	+	+	0	+
$f(n-1)$	-	-	0	+	+	+	0
$n f(n-1)$	-	0	0	+	+	0	0
$\frac{n f(n-1)}{f(n)}$	0	+	0	+	0	-	0

$P_f = [-1, 1] \cup [2, 3] \cup [4, \infty)$

$\therefore f(n) \geq 0 \xrightarrow{\text{موجب}} \rightarrow \frac{-P_0 \cdot r}{-P_0 + P_0 \cdot r} + \dots \Rightarrow P_{f(n)} = (-P_0) V(P_{0+n})$

ii) $\frac{n}{A} \begin{vmatrix} -1 & 0 & 1 \\ -1 & 1 & -1 \end{vmatrix}$, $x > 0 \Rightarrow P_f = [1, +\infty)$

$\Rightarrow n \neq -1 \quad |n-1| \geq n^r$

$\Rightarrow P_f = [(-1, -1) \cup (-1, 1)] \quad n \in [-r, 1]$

$\text{a)} \quad \begin{array}{c} r \\ + \quad 0 \quad + \\ + \end{array} \quad P_f = \mathbb{R} \quad \begin{array}{c} 1 \quad r \quad f \\ - \quad 0 \quad 0 \quad + \\ + \end{array}$

$k \geq 0, \quad |n-r|-1 \neq k \Rightarrow |n-r| \neq k+1$
 $|n-r|-1 \neq -k \Rightarrow |n-r| \neq 1-k$
 $-k+r = k-1 \Rightarrow k=1$

$n \neq |q-1| / n+r+n+r \neq 0 \rightarrow n \neq -|q-r|$

$n^2 - 4n + 9 = 0 \Rightarrow (n-r)^2 \Rightarrow n=r$

$\lim_{n \rightarrow \infty} \frac{1}{n} > 0 \rightarrow 0 < n < 1 / n \neq |q-1| / n > 0, n > -1$

$\Rightarrow P_f = (0, 1)$

$-1 \leq n^2 \leq 1 \rightarrow -1 \leq n^2 \leq 1 \rightarrow \sqrt{n^2} \leq 1 \rightarrow n \leq 1$
 $\rightarrow -\frac{1}{\sqrt{n}} < n < \frac{1}{\sqrt{n}}$

$P_f = \left[-\frac{1}{\sqrt{n}}, \frac{1}{\sqrt{n}} \right]$