

$[n] > \epsilon \rightarrow n, \omega \rightarrow f(n), f(n+1) \rightarrow f(n) - n + 1 \approx n \xrightarrow{n \gg \epsilon} \frac{n}{\epsilon} \approx \sqrt{-1}$

$[n] \leq \epsilon \rightarrow \omega \rightarrow f(n) = f(n+1) \approx f(n+1), \omega \rightarrow n \gg \frac{\epsilon}{\epsilon} \rightarrow \frac{\epsilon}{\epsilon} \approx \frac{n}{\epsilon}$

$\Rightarrow \mathcal{D}_g = [-\frac{\epsilon}{\epsilon} + \infty)$

$f(n) + f(n+1) \neq 0 \rightarrow (f(n+1))^2 \neq 0 \rightarrow n \neq -\frac{1}{\epsilon}$

$\frac{n^2(n+1) - (n+1)}{n^2-1} \approx \frac{(n+1)(n^2-1)}{n^2-1} \approx \frac{n^2(n^2+1+n+1)}{(n+1)^2} \approx \frac{n^2}{(n+1)^2} \approx \frac{1}{(n+1)^2}$

$\Rightarrow n+1 \xrightarrow{n \gg 1} y = 1$

$\mathcal{D}_g = \mathbb{R} - \{-\frac{1}{\epsilon}\}$

$\rightarrow a+b = \frac{1}{\epsilon} \left\{ \begin{array}{l} b = \frac{1}{\epsilon} \\ a = \frac{1}{\epsilon} \end{array} \right. \Rightarrow b+c = \frac{1}{\epsilon}, \omega$

$1+b = \frac{1}{\epsilon} \Rightarrow c = \frac{1}{\epsilon}$

$(n-1)^2 = n^2 - (n+1) \rightarrow a = -\frac{1}{\epsilon}, b = 1$

$\frac{n^2-1}{(n-1)^2} \approx \frac{(n-1)(n+1)}{(n-1)^2} \approx \frac{n+1}{n-1} \rightarrow c = 1$

$\Rightarrow a+b+c = 1+b+1 = 2 \approx 0$

$f(n+1) = (n-1)^2(n) \approx (n^2 - 2n + 1)n \approx n^3 - 2n^2 + n$

$f(1-n) = (-n-1)^2(-n) \approx -n^3 - 2n^2 - n$

$g(n) = n^3 - 2n^2 + n + -n^3 - 2n^2 - n \approx -4n^2$

$1-f(n) = 1 - (n^3 - 2n^2 + n) \approx 1 - n^3 + 2n^2 - n$

$1-f(n) \approx 1 - n^3 + 2n^2 - n \approx 1 - n^3$

$\Rightarrow f+1 \approx \omega$

$f(n) = (n-1)^2 + (n-1) \approx n^2 - 2n + 1 + n - 1 \approx n^2 - n$

$\rightarrow f(\epsilon) = (\epsilon)^2 + 1 \approx \epsilon^2 + 1 \approx \epsilon^2$

$f(1-n) = (1-n)^2 + (1-n) \approx 1 - 2n + n^2 + 1 - n \approx n^2 - 3n + 2$

$\mathcal{D}_{fg} = 1 \rightarrow f-g = 0 \rightarrow a = \frac{\epsilon}{\epsilon}, b = \frac{\epsilon}{\epsilon}$

$\Rightarrow f(n) + f(1-n) \approx 0$

$f(g(n)) = -K \leq 2K \rightarrow K \approx -1$

$\Rightarrow \frac{a-b}{\epsilon} - K \approx \frac{\epsilon - \epsilon + 1}{\epsilon} \approx \frac{1}{\epsilon}$

$\mathcal{D}_g \Rightarrow f(n) > 0 \rightarrow n > -1 \rightarrow \mathcal{D}_g = [-1, \infty) \Rightarrow \mathcal{D}_f = (-\infty, 1] \Rightarrow m - V \approx 0 \rightarrow m \approx V$

$f(x) = \sqrt{1-x} \approx 1 - \frac{x}{2}$

$g(x) = \sqrt{1+x} \approx 1 + \frac{x}{2}$

$\Rightarrow m+n \approx \sqrt{1-x} + \sqrt{1+x}$