

$$n \cos y - y \cos n \rightarrow \frac{n}{r} \cos y = y \cos \frac{\pi}{r} = 0 \rightarrow \cos y = 0$$

$$y = \left\{ r k \pi, \frac{\pi}{r}, r k \pi + \frac{\pi}{r} \right\} \quad \alpha = \frac{\pi}{r}$$

$$\left. \begin{aligned} y_1^r &= r n_1^r - r n_{1-1}^r \\ y_r^r &= r n_r^r - r n_{r-1}^r \end{aligned} \right\} \begin{aligned} n_1 &= n_r \\ y_1^r &= y_r^r \rightarrow y_1 = y_r \end{aligned}$$

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$$n y_1^r + r n - y_1^r y_r = 0 \rightarrow n y_1^r + r n = y_1^r y_r \quad n(y_1^r) = y(y_1^r)$$

$$n = y \quad \checkmark \quad \alpha = \frac{\pi}{r}$$

$$\frac{n y}{r} = \sqrt{n y} \rightarrow n = y \cdot r \sqrt{n y} \quad \alpha = \frac{\pi}{r}$$

$$n y_1^r + r n y = r n y \rightarrow n y_1^r + r n y = 0 \quad (n - y)^r = 0 \quad n = y \quad \checkmark \quad \alpha = \frac{\pi}{r}$$

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$$[y] + [n] = 1 \rightarrow [y] = (-[n])$$

$$n = 0 \rightarrow [y] = 1 \rightarrow y = \begin{bmatrix} 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{bmatrix} \quad \alpha = \frac{\pi}{r}$$

$$\left. \begin{aligned} |y| \cdot x &= r y & x &= r y - |y| \end{aligned} \right\} \quad \alpha = \frac{\pi}{r}$$

$$x = \begin{cases} y & y > 0 \rightarrow x = y \\ r y & y < 0 \rightarrow x = r y \rightarrow \frac{x}{r} = y \end{cases} \quad \checkmark \quad \alpha = \frac{\pi}{r}$$

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$$f(n) = \begin{cases} r n - b & n \geq r \\ a + r n & n < r \end{cases} \quad r(r) - b = a + r(r) \quad \boxed{a + b = 12}$$

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$$\left. \begin{aligned} n = a &\rightarrow a - b a \cdot a^r = - \frac{a^r}{b}, 1 - b - a = 0, a = 1 - b \\ n = b &\rightarrow a - b^r - b^r = 0 \rightarrow r b^r = a \end{aligned} \right\} \begin{aligned} 1 - b &= r b^r \rightarrow r b^r + b - 1 = 0 \\ &\left\{ \begin{aligned} b &= -1 \\ b &= \frac{1}{r} \end{aligned} \right. \quad \checkmark \quad \alpha = \frac{\pi}{r} \end{aligned}$$

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$$\boxed{b = -1 \rightarrow a = 1} \quad \boxed{a + b = -1, r = 1}$$

$$y = \frac{r}{\sqrt{a n^2 + b n + c}}$$

$$b n + c = 0 \xrightarrow{n = r} r b + c = 0 \rightarrow c = -r b \quad b < 0$$

$$r a + c - r |b| = 0 \rightarrow r b + r b = b$$

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

$$\frac{r_{n+1}r}{n+b} + a = \frac{r_{n+1}r + a(n+b)}{n+b}$$

مقدار را ساده می کنیم

$$r+a=$$

$$a = r - \frac{r-r_b}{n+b}$$

مقدار را ساده می کنیم

$$r+b \Rightarrow b = -r$$

$$\frac{1}{\sqrt{\ln|1}}$$

$$\ln|1|$$

$$\ln|1|$$

$$n|1| \leq n(1-1)$$

$$\frac{1}{n^2-n}$$

$$n(n^2-1)$$

$$[-1, 0] \cup [2, +\infty)$$

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Y

$$\sqrt{x} + \sqrt{y} = 9 \rightarrow \sqrt{y} = 9 - \sqrt{x}$$

$$x=0 \rightarrow y=81$$

$$x=81 \rightarrow y=0$$

$$D = [0, 81]$$

$$f \rightarrow y = \sqrt{\frac{1}{\ln|1-x|}}$$

$$\ln|1-x|$$

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$$D_f = \mathbb{R} \setminus \{1\} \cup \{0\} = \mathbb{R} \setminus \{1\}$$

A

$$y = \frac{1}{\sqrt{\left\lfloor n - \frac{1}{r} \right\rfloor + \left\lfloor n + \frac{r}{r} \right\rfloor}}$$

$$\left\lfloor n - \frac{1}{r} \right\rfloor + \left\lfloor n + \frac{r}{r} \right\rfloor$$

$$\left\lfloor n - \frac{1}{r} \right\rfloor + 1 + \left\lfloor n + \frac{r}{r} \right\rfloor - 1$$

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$$\left\lfloor n + \frac{1}{r} \right\rfloor > \left\lfloor n + \frac{1}{r} \right\rfloor, \quad r_{n+1} \geq 1, \quad r_n > \frac{1}{r}, \quad n \geq \frac{1}{r}$$

$$f = \sqrt{\log(r+a)} \rightarrow 1, \log(r+a)$$

$$1 > r_{n-a}$$

$$1 > r_n$$

$$\frac{1+a}{r} > n \quad (1)$$

$$r_{n-a} > r_n$$

$$\frac{n}{r} > \frac{a}{r}$$

1.

$$D_f = (1) \cap (2) = \left(\frac{a}{r}, \frac{b+a}{r}\right]$$

$$b = \frac{a}{r}$$

$$c-b = \frac{b+a}{r} - \frac{a}{r} = \frac{b}{r} = \frac{a}{r^2}$$

$$c = \frac{b+a}{r}$$