

$$n^2 + 2n = an - 4 \rightarrow n^2 (2 - n) + 4 = 0 \xrightarrow{\Delta} (2-a)^2 - 16$$

$$2-a = \pm 4 \begin{cases} 2-a = 4 \rightarrow a = -2 \checkmark \\ 2-a = -4 \rightarrow a = 6 \checkmark \end{cases}$$

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$$f(1) = \frac{1+a}{2-b} \xrightarrow{\substack{a=11 \\ b=-1}} \frac{12}{3} = \frac{4}{1}$$

$$f(2) = \frac{f+a}{f-b} = 2 \rightarrow f+a = 12 - 2b$$

$$g(2) = f+b = 2 \rightarrow 12 + 2b = 4 \rightarrow 12 = 4 - 2b \xrightarrow{+2} 18 = 12 - 2b$$

$$\Rightarrow f+a = 18 \Rightarrow \underline{a=11}, \underline{b=-1}$$

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$$f(-1) \rightarrow 2n^2 + an + b \rightarrow 2 - a + b = 0 \rightarrow \underline{b = a - 2} \xrightarrow{a=9} \underline{b = -1}$$

$$f(4) \rightarrow 2n^2 + an + b \rightarrow 32 + 4a + b = 0 \rightarrow 32 + 4a = 0 \rightarrow \underline{a = -8}$$

$$f(1) \rightarrow \frac{8}{2-4-1} = \frac{-8}{-1}$$

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$$\xrightarrow{(-)} -2 - a + b = 0 \quad a^2 + 14b = 0 \quad 4a + 14a + a^2 = 0$$

$$(a+1)^2 = 0 \rightarrow a = -1$$

$$b = -2$$

$$a+b = \underline{-1-2}$$

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$$\xrightarrow{mal} 1 + m + 1 \geq 0 \rightarrow m \geq -2 \rightarrow (+\infty, -2] \checkmark$$

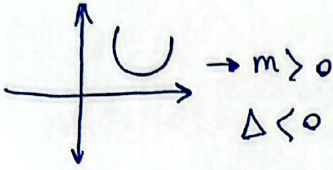
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$$\epsilon - \frac{1}{n^x} > 0 \quad \epsilon > \frac{1}{n^x} \rightarrow x > \frac{1}{|n|} \rightarrow x |n| > 1 \rightarrow |n| > \frac{1}{x}$$

$$\rightarrow n > \frac{1}{x}$$

$$n \leq -\frac{1}{x}$$

$$\mathbb{R} - \left(\frac{1}{x}, -\frac{1}{x}\right)$$

$$m n^x + x m n + 1 > 0$$


$$m > 0$$

$$\Delta < 0$$

$$f(m) - f(m) < 0$$

$$f(m) (m-1)$$

m	0	1
	+	-
	+	+

$$m = (0, 1)$$

$$\left(\frac{1}{x}\right) x + k = 1 + 1 \Rightarrow k = 0$$

$$\left(\frac{1}{x}\right) \frac{x^x - 1}{x^{x-1}} \xrightarrow{x \neq a} a = \frac{1}{x}$$

$$a + k = \frac{1}{x}$$

$$x a n + x \frac{-x}{x^2} - x a + x = -x + b \rightarrow -x a + x = b$$

$$x n + b = x n - x \quad \underline{b = -x} \quad \text{and} \quad \underline{a = x}$$

$$x a^x + x a = x \rightarrow a^x + a - x = 0 \rightarrow \underline{a = 1} \quad \text{and} \quad \underline{a = -x}$$