

$$f(x) - x + 1 \geq 0 \begin{cases} x - 1 - x + 1 = 0 \\ x + 3 - x + 1 = 3x + 4 \geq 0 \rightarrow 3x \geq -4 \rightarrow x \geq -\frac{4}{3} \end{cases} \rightarrow [-\frac{4}{3}, +\infty) = D_f \quad (2) - 1$$

$$x^p + x + 1 \rightarrow (x+1)^p \neq 0 \rightarrow x \neq -1 \rightarrow \mathbb{R} - \{-1\} \quad (2) - 2$$

$$3(x^3 + 1)(x^p + x + 1) \rightarrow 3(x+1)^3 \rightarrow x = -1$$

$$\frac{3(x+1)^3}{(x+1)^4} = \frac{3}{x+1}$$

$$\frac{x^3 + 2x^2 - x - 2}{x^3 - x^2} \cdot \frac{x-1}{x^2 + 3x + 2} = \frac{(x-1)(x+2)(x-1)}{(x+1)(x+2)} = x+2$$

$$\frac{3x^2 - x - 2}{3x^2 + 3x} \cdot \frac{x-1}{x^2 + 3x + 2} = \frac{(x-1)(x+2)(x-1)}{(x+1)(x+2)} = x+2$$

$$\frac{x-2}{x-2} = 1$$

$$\frac{a+2}{1+b} = 3 \rightarrow 3+3b = a+2 \rightarrow 1+3b = 3-b \rightarrow 4b = 2 \rightarrow b = \frac{1}{2}$$

$$\frac{a+2}{-1+b} = 1 \rightarrow -1+b = -a+2 \rightarrow a = 3-b \rightarrow a = \frac{5}{2}$$

$$\frac{(x-1)(x+1)}{(x-1)(x-2)} \rightarrow \frac{x+1}{x-2} = \frac{b}{a} \rightarrow b = \frac{a(x+1)}{x-2}$$

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

$$f(x+1) = (x-2)^p(x) = (x^p - 2x^{p-1} + \dots) \cdot x = x^p - 2x^{p-1} + \dots$$

$$f(1-x) = (-2-x)^p(-x) = (-x^p - 2x^{p-1} + \dots) \cdot (-x) = x^p + 2x^{p-1} + \dots$$

$$1-2x = -1 \rightarrow 2x = 2 \rightarrow x = 1$$

$$1-2x = 3 \rightarrow 2x = -2 \rightarrow x = -1$$

s.a.m

$$\frac{x}{t^p} \cdot \frac{\sqrt{x}}{t} = 9 \rightarrow t^p + t - 9 = 0 \rightarrow (t+3)(t-2) = 0 \rightarrow t = 2, -3$$

(2) - 9

$$\sqrt{x} = 2, x = 4 \rightarrow 4^p + 1 \cdot 4 = 4 \cdot 9$$

$$(x-1)^p + x - 1 \rightarrow x^p - 1 - px^p + px + x - 1 = x^p - px^p + px + x - 1$$

$$(1-x)^p + 1 - x \rightarrow -x^p + 1 - px + px^p + 1 - x \rightarrow -x^p + px^p - px + 1 - x$$

(2) - 1

$$b - \frac{1}{x} > 0 \rightarrow b > \frac{1}{x} \rightarrow \frac{b}{x} > \frac{1}{x^2} \rightarrow b = \frac{1}{x^2}$$

$$x - \frac{1}{x} > 0 \rightarrow x > \frac{1}{x} \rightarrow \frac{x}{x^2} > \frac{1}{x^2} \rightarrow a = \frac{1}{x^2}$$

(2) - 9

$$\sqrt{x-x} + pk = g(x) \rightarrow pk$$

$$\sqrt{x-x} + k - 1 = f(x) \rightarrow pk - 1$$

(2) - 1

$$p_x + p > 0 \rightarrow p_x > -p \rightarrow x > -1$$

$$\sqrt{m-x} + n \leq v$$

$$\sqrt{m-x} + n = v \rightarrow n = v - \sqrt{m-x}$$

(2) - 1