

$$D_f = [r, \omega] + \{-\omega\}$$

$$y = \sqrt{x f(x)} \Rightarrow x f(x) \geq 0$$

$$y = \sqrt{\frac{-x}{f(x)}} \Rightarrow f(x) \neq 0$$

$$\left. \begin{array}{l} x \neq -r \\ x \neq -r \\ x \neq 0 \end{array} \right\} \Rightarrow \boxed{\text{مستعمل صفر عدد صحیح است}}$$

$$f(x) = x^r - r x + r - f(r)$$

$$r + 9 + r - r = 10 \Rightarrow f(-r) = 10$$

$$f(1) = r + r = 9$$

$$\left. \begin{array}{l} f(\omega) = \omega - r = r \\ f(r) = r + r = r \end{array} \right\} \boxed{r + r = 9}$$

$$-f(x) = 9x + r - f(x-1)$$

$$f(x) = -9x - r + f(x-1)$$

$$f(1) = -9 - r + r = -9$$

$$f(x-1) = 9x + a x^r - b x + r$$

$$9x + a - b = -10 \Rightarrow \boxed{a - b = -19}$$

$$f(n) = \frac{n^2 + 1}{n^2} + f\left(\frac{1}{n}\right)$$

$$f(1) = 1$$

$$f\left(\frac{1}{-3}\right) = \frac{\frac{1}{(-3)^2} + \frac{1}{(-3)^2}}{\frac{1}{(-3)^2}} = \frac{\frac{1}{9} + \frac{1}{9}}{\frac{1}{9}} = \frac{\frac{2}{9}}{\frac{1}{9}} = 2$$

$$f(-3) = \frac{(-3)^2 + 1}{(-3)^2} = \frac{10}{9} \Rightarrow \frac{10}{9} - \frac{1}{9} = \frac{9}{9} = 1$$

$$f = \frac{\{(2,0), (1,-2), (0,2), (1,1)\}}{\{(0,3), (3,0)\}}$$

$$\frac{g}{f} = \frac{\{(0,3), (3,0)\}}{\{(2,0), (1,-2), (0,2), (1,1)\}}$$

$$f = \{-2, 1\}, \{2, 3\}, \{3, 1\}, \{-1, 2\}$$

$$g = \{2, 1\}, \{2, 3\}, \{3, 1\}, \{-1, 2\}$$

$$f = \{(2,2), (1,2), (1,3), (3,0), (2,1)\}$$

$$g = \{(2,4), (1,4), (1,1), (3,2), (2,3)\}$$