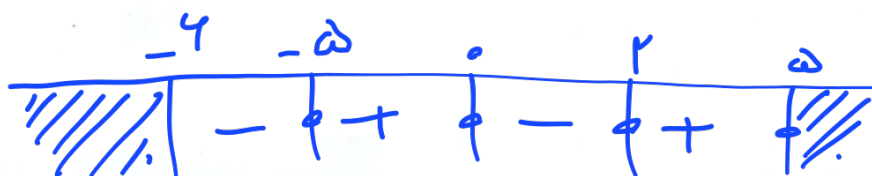


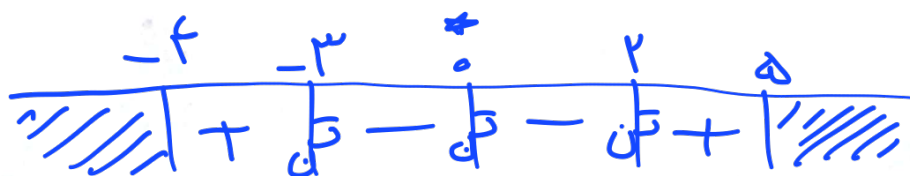
$$Df = [2, 5] \cup [-5, 0] \quad (1)$$

طبقه منطوق



$$Df = [0, 2] \cup (-3, 0] \Rightarrow \begin{matrix} -2 \\ -1 \end{matrix} \Rightarrow \begin{matrix} 4 \\ 3 \end{matrix} \quad (1)$$

طبقه منطوق



$$f(x) - 2f(x) = 2 \Rightarrow f(x) = -2$$

$$f(-x) + f = 1 \Rightarrow \boxed{f(-x) = 1} \quad (2)$$

$$\begin{aligned} f(f(1)) &= 2 \\ f(f(5)) &= 7 \end{aligned} \Rightarrow \begin{matrix} 1 \\ 5 \end{matrix} \Rightarrow \begin{matrix} 2 \\ 7 \end{matrix} \Rightarrow \boxed{9} \quad (3)$$

$$(x-1)^2 - b(x-1) + 2 \Rightarrow ax^2 + a - 2xa - bx + b + 2$$

$$\cancel{ax^2 + a - 2xa - bx + b + 2} - \cancel{ax^2 + bx - 1} = a + b - 2xa = 9x + 2 \Rightarrow \begin{aligned} a &= -3 \\ b &= 5 \end{aligned}$$

$\hookrightarrow a - b = -8$

$$f(\sqrt{x}-1) = \frac{(\sqrt{x}-1)^r + f(\sqrt{x}-1) + a}{(\sqrt{x}-1)^r + f(\sqrt{x}-1) + v} \Rightarrow \frac{1^r + 1 - 2\sqrt{x} + 2\sqrt{x} - 1 + a}{1^r + 1 - 2\sqrt{x} + 2\sqrt{x} - 1 + v} = \frac{1^r}{1} = \frac{1}{1}$$

$$\frac{x^r + 1}{x^r} = x^r + \frac{1}{x^r}$$

$$x - \frac{1}{x} = 1 \Rightarrow (x - \frac{1}{x})^r = x^r + \frac{1}{x^r} - 1 = 1 \Rightarrow x^r + \frac{1}{x^r} = 2$$

$$a) \frac{f}{g} \Rightarrow (1, 0) \cdot (1, -\frac{f}{\sqrt{x}}) \cdot (0, \frac{r}{1})$$

$$g(x) = 1 - x^r \Rightarrow x^r = 1 - g(x)$$

$$b) \frac{g}{f} \Rightarrow (1, \frac{g}{f}) \cdot (1 - \frac{\sqrt{x}}{f}) \cdot (0, \frac{r}{1})$$

$$f(x) = (1, 1) \cdot (1, 1) \cdot (-1, 1) \cdot (1, -1)$$

$$f(x) + 1 \Rightarrow (1, 2) \cdot (1, 2) \cdot (-1, 2) \cdot (1, -1)$$

$$f^r(x) + 1 \Rightarrow (1, 1) \cdot (1, 1) \cdot (-1, 1) \cdot (1, 1) \cdot (1, 1) \cdot (-1, 1) \cdot (1, 1) \cdot (1, 1)$$

$$f(x) \Rightarrow (1, 1) \cdot (1, 1) \cdot (-1, 1) \cdot (1, -1)$$

$$a) f - g \Rightarrow (1, 1) \cdot (1, 1) \cdot (1, 1)$$

$$f = (1, 1) \cdot (1, 1) \cdot (1, 1) \cdot (1, 1) \cdot (1, 1)$$

$$b) \frac{f}{g} \Rightarrow (1, 1) \cdot (1, 1) \cdot (1, 1)$$