

$$x \geq 0 \quad [-4, 0]$$

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$$\frac{-x}{f(x)} \geq 0 \quad (0, \infty), (-3, 0)$$

$$\begin{array}{c} -2, -1, 1, 2, 3, 4 \\ \underbrace{\hspace{1cm}} \quad \underbrace{\hspace{1cm}} \\ \text{بازه اول} \quad \text{بازه دوم} \end{array}$$

۶ عدد صحیح

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$$f(1) - 2f(1) = 1 - 4 + 1 \rightarrow f(1) = 1 \quad f(1) = -1$$

$$f(x) - 2(-x) = x^2 - 3x + 1 \rightarrow f(x) = x^2 - 3x$$

$$f(-1) = (-1)^2 - 3(-1) = 1 + 3 = 4$$

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$$f(1) = 2(1) + 3 = 5$$

$$f(f(1)) = f(5) = 5 - \sqrt{5+4} = 5 - 3 = 2$$

$$f(f(5)) = f(5) \rightarrow 2 \quad \text{و} \rightarrow f(1) = 2(1) + 3 = 5$$

$$2 + 5 = 7$$

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$$2ax - a - b = 4x + 1$$

$$2a = 4 \rightarrow a = 2 \quad -a - b = 1 \rightarrow -2 - b = 1 \rightarrow b = -3$$

$$a - b = 2 - (-3) = 5$$

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$$f(r) = r^r - r(r) + 1 = 1 \rightarrow rf(r) - r(1) = r$$

$$f(-1) = (-1)^r - r(-1) + 1 = 0$$

$$f(2) = r2 - r \rightarrow f(r) = 1$$

$$\frac{r40}{1} = \boxed{V}$$

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$$f(r) = r(r) + 1 = 1r \rightarrow rf(r) = r(1r) = r9$$

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

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

$$\frac{r9 - r}{V} = \frac{r40}{V} = \boxed{5}$$

V

$$f(r) = 1 \rightarrow f(f(r)) = f(1) = 9$$

$$f(r) = r \rightarrow f(f(r)) = f(r) = 9$$

$$\frac{9 - 9}{9 - r} = \frac{0}{\varepsilon} = \boxed{0}$$

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$$x + r = \sqrt{r} \rightarrow (x + r)^r = r \rightarrow x^r r \leq x + r = r$$

$$x^r + r = -1 \quad f(\sqrt{r} - r) = \frac{-1 + 4}{-1 + 2} = \frac{3}{1} = r$$

$$f(r) \rightarrow \frac{(r)^r + r(r) + 4}{(r)^r + f(r) + 2} = \frac{r + 1 + 4}{r + 1 + 2} = \boxed{\frac{r1}{1V}}$$

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$$f(\sqrt{r}) = (\sqrt{r})^r + \frac{1}{(\sqrt{r})^r} = r + \frac{1}{r}$$

$$(f(\sqrt{r}))^r = (r + \frac{1}{r})^r = r^r + r(r)(\frac{1}{r}) + \frac{1}{r^r} = r^r + r \frac{1}{r^r}$$

$$(r^r + r + \frac{1}{r^r}) - (r^r + \frac{1}{r^r}) = \boxed{r}$$

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