

$$-r \leq 1 \Rightarrow r a + (-r) = f(-r) \quad f(a) = a \Rightarrow a > 1 \Rightarrow \forall a + r \quad r(va + v) = r a - r + a$$

$$1ra + 1r = ra - r + a \quad a = -\frac{r}{a}$$

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$$\left. \begin{aligned} f(r + \sqrt{r}) &= \sqrt{r + \sqrt{r}} + \frac{\sqrt{r - \sqrt{r}}}{\sqrt{(r + \sqrt{r})(r - \sqrt{r})}} + r = \sqrt{r + \sqrt{r}} + \sqrt{r - \sqrt{r}} + r \\ f(r - \sqrt{r}) &= \sqrt{r - \sqrt{r}} + \frac{\sqrt{r + \sqrt{r}}}{\sqrt{(r - \sqrt{r})(r + \sqrt{r})}} + r = \sqrt{r - \sqrt{r}} + \sqrt{r + \sqrt{r}} + r \end{aligned} \right\} + \Rightarrow r\sqrt{r} + r$$

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$$\left. \begin{aligned} x = x \rightarrow (rf(x) - rf(-x)) &= (rx^r - (-x))x^r \rightarrow rf(x) + f(-x) = \Lambda x^r - rx \\ x = -x \rightarrow (rf(-x) - rf(x)) &= (rx^r + x)x^r \rightarrow rf(-x) - rf(x) = \Lambda x^r + rx \end{aligned} \right\} + \Rightarrow -\Delta f(x) = r \cdot x^r + x$$

$$f(x) = \frac{r \cdot x^r + x}{-\Delta} \Rightarrow f(x) = -\frac{rx^r + x}{\Delta}$$

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$$x = 0 \rightarrow rf(0) = r m - 1 \Rightarrow f(0) = \frac{r m - 1}{r} \quad x = -r \rightarrow rf(0) = 1r + rm + r m - 1 \Rightarrow f(0) = \frac{1\Delta + \Delta m}{r}$$

$$\frac{r m - 1}{r} = \frac{1\Delta + \Delta m}{r} \Rightarrow m = \frac{q}{r} \quad \frac{\frac{r v}{r} - 1}{r} = \frac{\frac{r \Delta}{r}}{r} = f(0)$$

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$$\frac{r}{x} \times (ax + b + \frac{a}{x} + b) = \frac{rx^r - 1rx + r}{x} \quad \frac{ax^r + r \frac{1}{x} + a}{x} = \frac{rx^r - 1rx + r}{x}$$

$$a = r \quad b = -r \quad \star x \neq 0$$

$$f(x) = rx - r$$

$$f(-1) = -r - r = -2r$$

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$$\left. \begin{aligned} f(x) &= (x-1)\sqrt{1-x} \rightarrow 1-x \geq 0 \rightarrow x \leq 1 \\ g(x) &= -\sqrt{(1-x)^3} \rightarrow 1-x \geq 0 \rightarrow x \leq 1 \end{aligned} \right\} D_f = D_g = \text{برای همه } (-\infty, 1]$$

برای همه

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$$\left. \begin{aligned} f(x) &= x\sqrt{x} \rightarrow x \geq 0 \\ g(x) &= \sqrt{x^3} \rightarrow x \geq 0 \end{aligned} \right\} D_f = D_g = [0, +\infty) \quad \text{برای همه}$$

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$$\left. \begin{aligned} f(x) &= [\sqrt{x} - \lfloor \sqrt{x} \rfloor] \rightarrow x \geq 0 \Rightarrow [0, +\infty) \\ g(x) &= \sqrt{x-|x|} \rightarrow x-|x| \geq 0 \rightarrow x \geq |x| \Rightarrow [0, +\infty) \end{aligned} \right\} D_f = D_g = [0, +\infty) \quad \text{برای همه}$$

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$$f+g = \{(0,2)(1,3)(2,4)(3,4)\} \quad f-g = \{(0,-2)(1,1)(2,0)(3,-4)\}$$

تغییرات در هر مرحله

$$\left(\frac{f+g}{f-g}\right) = \{(0,-1)(1,3)(2,-\frac{4}{3})\}$$

$$\text{الف) } \left(\frac{f+g}{f-g}\right)(1) = 3$$

$$\text{ب) } \left(\frac{f+g}{f-g}\right)(2) = \boxed{\text{تن}}$$

$$\text{ج) } f(0) \times g(-1) = 0 \times 1 = 0$$

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$$\text{الف) } 2x-1=2 \Rightarrow x=1 \quad 2x-1=1 \Rightarrow x=0 \quad 2x-1=0 \Rightarrow x=\frac{1}{2} \quad 2x-1=-2 \Rightarrow x=-\frac{1}{2} \quad 2x-1=3 \Rightarrow x=2$$

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

$$\text{ب) } h(x) = \{(-2,1)(2,1)(0,2)(-2,-1)(2,1)\}$$

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