

$$f(x) = (x-1)\sqrt{1-x} \quad 1-x \geq 0$$

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

$$D_f = x \leq 1$$

دو تابع با هم برابرند $(-\infty, 1]$

$$g(x) = -\sqrt{1-x}^2$$

$$-\sqrt{1-x}^2 = -1\sqrt{1-x}$$

$$D_g = (-\infty, 1]$$

$$x \leq 1$$

دو تابع با هم برابرند $1-x \leq 0 \rightarrow x-1 = -(1-x)$

$$f(x) = -\sqrt{(1-x)(1-x)} \leftarrow -\sqrt{(1-x)^2}$$

$$-\sqrt{(1-x)^2}$$

$$f(x) = \sqrt{x}$$

$$D_f = [0, +\infty)$$

$$x \geq 0 \rightarrow x = \sqrt{x^2}$$

$$\sqrt{x^2} = \sqrt{x^2}$$

$$g(x) = \sqrt{x^2}$$

$$D_g = [0, +\infty)$$

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$$f(x) = [\sqrt{x} - \lfloor \sqrt{x} \rfloor] \quad x \geq 0 \quad D_f = [0, +\infty)$$

$$0 \leq \sqrt{x} - \lfloor \sqrt{x} \rfloor < 1 \quad R_f = [0, 1]$$

$$g(x) = \sqrt{x - |x|}$$

$$x - |x| \geq 0 \quad x \geq |x| \quad D_g = [0, +\infty)$$

$$g(x) = 0 \quad \leftarrow |x| = x \quad x \geq 0$$

$$R_g = [0, 1]$$

دو تابع با هم برابرند

$$g = \{(-1, 1), (1, 1), (2, 3), (3, 5), (5, 2), (2, 1), (1, 2), (3, 3), (3, 1), (1, 0), (0, 0)\}$$

$$\left(\frac{f+g}{f-g}\right)(1) = \frac{f+1}{f-1} = \frac{w}{f-1} \quad \left(\frac{f+g}{f-g}\right)(f) = \frac{f+w}{f-w} = \frac{f}{0}$$

$$f(0)g(-1) = (0)(1) = 0$$

$$w_x = f \quad x=1$$

$$v_x = 1 \rightarrow x$$

$$f(x) = \{(2, 1), (-1, 4), (0, 5), (2, 2), (2, -1)\}$$

$$g(x) = f(w_x - 1)$$

$$g(x) = \{(1, 1), (0, 4), (\frac{1}{w}, 5), (-\frac{1}{w}, 2), (\frac{f}{f}-1)\}$$

$$w_x = 1 \rightarrow x=1$$

$$w_x = 1 \rightarrow x=1$$

$$w_x = 1 \rightarrow x=1$$

$$w_x = 1 \rightarrow x=1$$

$$w_x = 0 \rightarrow x=0$$

$$w_x = \frac{1}{x} \rightarrow x=\frac{1}{w}$$

$$w_x = -1 \rightarrow x=-\frac{1}{w}$$

$$w_x = f \rightarrow x=f$$

$$h(x) = f(|x|)$$

$$h(x) = \{(2, 1), (1, 4), (0, 5), (2, 2), (3, -1)\}$$

Arman

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$$f(x) = \begin{cases} (a+1)(x+y) & x > 1 \\ wa + yx & x < 1 \end{cases}$$

$$r(a+1)(v) = w_a - k + a$$

$$1Ka + 1K = Ka - K \quad | : a = -1N \quad | a = -1N$$

$$\begin{aligned} & \sqrt{y-\sqrt{x}} + \frac{1}{\sqrt{y-\sqrt{x}}} + y + \sqrt{y+\sqrt{x}} + \frac{1}{\sqrt{y+\sqrt{x}}} + y + (x) \cdot \sqrt{x} + \frac{1}{\sqrt{x}} + y \\ & (y+\sqrt{y})(y-\sqrt{y}) = x - y = 1 \quad \frac{1}{y+\sqrt{y}} = y - \sqrt{y} \quad \begin{array}{l} A = (\sqrt{y+\sqrt{x}} + \sqrt{y-\sqrt{x}}) \quad A\sqrt{y} \\ y+\sqrt{y} + y-\sqrt{y} + y = y \\ y\sqrt{y} + y \end{array} \\ & \sqrt{y-\sqrt{x}} + \sqrt{y+\sqrt{x}} + y + \sqrt{y+\sqrt{x}} + \sqrt{y-\sqrt{x}} = y \left(\underbrace{\sqrt{y-\sqrt{x}} + \sqrt{y+\sqrt{x}}}_{\sqrt{y}} \right) + y \end{aligned}$$

$$\begin{aligned} & \psi(f(x) - wf(-x) = Kx^r - u) & f(x) - g(-x) &= Ax^r - u \\ & \psi(f(-x) - wf(x) = Kx^r + u) & g(-x) - g(x) &= 14x^r + u \\ & & -wf(x) &= 40x^r + u \\ & & -f(x) &= \frac{40x^r + u}{10} & f(x) &= -Kx^r - u \end{aligned}$$

$$\begin{aligned} (x+y)f(x) - \omega x f(x+y) &= f(x) - m^x + \omega m - 1 \\ \xrightarrow{x=0} \quad \omega f(0) &= \omega m - 1 \quad \rightarrow \quad f(0) = \frac{\omega m - 1}{\omega} = \frac{\omega}{\omega} \frac{\omega m - 1}{\omega} \\ \xrightarrow{x=\omega} \quad \omega f(0) &= 1 - \omega m + \omega m - 1 \\ \omega f(0) &= 1 - \omega m + \omega m \\ \omega m - 1 &= 1 - \omega m \quad m = \frac{1}{\omega} \end{aligned}$$

$$f(x) + f\left(\frac{1}{x}\right) = ax + b + \frac{a}{x} + b$$

$$\frac{ax^2 + bx + a}{x} = \frac{px^2 - 12x + p}{x} \quad a = p \quad b = -9$$

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

Arman