

نام و نام خانوادگی پروردگار
پاسخنامه تشریحی تکلیف شماره ۶ کلاس یازدهم پسر A

$$f'(a) = f'(1) + a \Rightarrow f'(a+1)(v) = f'_a - f' \Rightarrow \|f'_a + f' = f'_a - f' \Rightarrow$$

$$a = -1 \Rightarrow a = -1$$

$$(\sqrt{r}-1)^2 = r+1-2\sqrt{r} = r-1-2\sqrt{r}+2$$

$$f\left(\frac{x-1}{y}\right) + f\left(\frac{x+1}{y}\right) = \frac{\sqrt{x}-1}{\sqrt{y}} + \frac{\sqrt{x}}{\sqrt{x}-1} + 1 + \frac{\sqrt{x}+1}{\sqrt{y}} + \frac{\sqrt{x}}{\sqrt{x}+1} + 1 =$$

$$\frac{\sqrt{x}-1}{\sqrt{y}} + \frac{\sqrt{x} \times (\sqrt{x}+1)}{(\sqrt{x}-1)(\sqrt{x}+1)} + 1 + \frac{\sqrt{x}+1}{\sqrt{y}} + \frac{\sqrt{x} \times (\sqrt{x}-1)}{(\sqrt{x}+1)(\sqrt{x}-1)} + 1 = \frac{\sqrt{x}-1}{\sqrt{y}} + \frac{\sqrt{x}+1}{\sqrt{y}} + \frac{\sqrt{x}+1}{\sqrt{y}} +$$

$$\frac{\sqrt{x}-1}{\sqrt{y}} + 1 = \frac{1\sqrt{x}}{\sqrt{y}} + 1 = \frac{1\sqrt{x}}{\sqrt{y}} + 1 = \boxed{1\sqrt{x} + 1}$$

$$f'(x) - f'(-x) = f'_x - x \times f'' = f'_x - f'_x = 0$$

$$\Rightarrow f(x) = -\frac{x}{\Delta}$$

$$\begin{aligned} x=0 &\Rightarrow f(0) = r_{n-1} \xrightarrow{x^r} f(0) = q_m \cdot r \\ x=-r &\Rightarrow f(0) = 1q + r_m + r_{m-1} \Rightarrow f(0) = \Delta_m + 1\Delta \end{aligned} \quad \left. \begin{aligned} q_m - r &= \Delta_m + 1\Delta \Rightarrow \\ r_m &= 1\Delta \Rightarrow m = r/\Delta \end{aligned} \right\}$$
$$f(0) = r(r/\Delta) - 1 = 1r/\Delta \Rightarrow \boxed{f(0) = r/\Delta}$$

$$\begin{aligned} f(x) + f\left(\frac{1}{x}\right) &= ax + b + \frac{a}{x} + b = \frac{ax^2 + 1bx + a}{x} = \frac{rx^2 - 1rx + r}{x} \\ \Rightarrow \begin{cases} a = r \\ b = -r \end{cases} & \quad f(-1) = (r)(-1) + (-r) = -9 \end{aligned}$$

$$\left. \begin{aligned} D_f &= D_g = (-\infty, 1] \\ (x-1) = a &\rightarrow \begin{cases} f(x) = a\sqrt[3]{a} \\ g(x) = \sqrt[3]{a^3} \end{cases} \end{aligned} \right\} \left. \begin{aligned} D_f &= D_g \\ R_f &= R_g \end{aligned} \right\} \Rightarrow \boxed{f(x) = g(x)}$$

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$$f(x) \rightarrow x \geq 0 = x^2 \geq 0 \leftarrow g(x)$$

$$D_f = D_g$$

$$x\sqrt{x} = \sqrt{x^3} \rightarrow R_f = R_g$$

$$\boxed{f(x) = g(x)}$$

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

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

$$f(x) \rightarrow \text{مربعه صفر}$$

$$\boxed{f(x) = g(x)}$$

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$$g(x) \rightarrow x = |x| \text{ مربعه صفر} \rightarrow \text{مربعه صفر}$$

$$\text{الف) } \left(\frac{f+g}{f-g} \right)(1) = \frac{f(1) + g(1)}{f(1) - g(1)} = \frac{2+1}{2-1} = 3$$

$$\text{ب) } \left(\frac{f+g}{f-g} \right)(2) = \frac{f(2) + g(2)}{f(2) - g(2)} = \frac{3+3}{3-3} = \text{تعريف نشده}$$

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

$$\text{الف) } g(x) = f(3x-1) \rightarrow g(x) = \left\{ \left(-\frac{1}{3}, 2\right), (0, 2), \left(\frac{1}{3}, 5\right), (1, 1), \left(\frac{4}{3}, -1\right) \right\}$$

$$\text{ب) } h(x) = f(|x|) \rightarrow h(x) = \left\{ (2, 1), (-2, 1), (1, 5), (3, -1), (-3, -1) \right\}$$

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