

نام و نام خانوادگی صادق متقی پاسخنامه تشریحی تکلیف شماره ۳ کلاس (دوازدهم)

$$f(x) = \begin{cases} \sqrt{x-1} & : x \geq 1 \\ \sqrt{x+1} & : x < 1 \end{cases} \rightarrow y = \sqrt{x} \quad x \geq 0 \quad D_f = [1, \infty) \quad D_g = [-1, \infty)$$

$$g = \frac{1^w (12^w + 112^w + 12^w + 1)}{(12^w + 1)^w} = \frac{1^w (12^w + 1)^w}{(12^w + 1)^w} = \frac{1^w}{12^w + 1} \neq 0 \quad D_g = \mathbb{R} - \{ \frac{1}{12} \}$$

$$\left. \begin{aligned} \frac{a+y}{1+b} &= 42 \\ \frac{y-a}{b-1} &= -1 \\ c &= y \end{aligned} \right\} \begin{aligned} x=1 \\ x=-1 \\ x=0 \end{aligned}$$

$$\left. \begin{aligned} a+y &= 1+3b \\ b-1 &= y-a \end{aligned} \right\} \begin{aligned} 1-b+y &= 1+3b \\ \rightarrow a &= 1-b \end{aligned}$$

$$\boxed{b = \frac{1}{y}} \quad \boxed{a = \frac{1}{y}a}$$

$$\boxed{b+c = \frac{1}{y}a}$$

$$g(x) = \frac{(x-1)(x+1)}{(x-1)(x-1)}$$

$$f(x) = \frac{x+1}{(x-1)}$$

$$x^2 + ax + b = (x-1)(x-1)$$

$$x^2 - (1+1)x + 1$$

$$\boxed{1+1=a} \quad \boxed{1=b}$$

$$\boxed{a=2} \quad \boxed{b=1}$$

$$x=0 \rightarrow \begin{cases} g(0) = \frac{1}{b} \\ f(0) = \frac{1}{c} \end{cases} \quad \boxed{b=c}$$

$$a+b = 2+1+1 = 4$$

$$g(x) = \frac{(x-1)^2 x}{(x+1)^2} + \frac{(-x-1)^2 (-x)}{(x+1)^2} \Rightarrow x \frac{(x-1)^2 - (x+1)^2}{(x+1)^2} = x \frac{(-1-1)x}{(x+1)^2} = -12x = g(x)$$

$f(x) = \frac{x-1}{x+1}$ $f(1) = \frac{1-1}{1+1} = 0$ $f(-1) = \frac{-1-1}{-1+1}$ $f(x) = \frac{x-1}{x+1}$ $f(1) = \frac{1-1}{1+1} = 0$ $f(-1) = \frac{-1-1}{-1+1}$	$f(1) = \frac{1-1}{1+1} = 0$ $f(-1) = \frac{-1-1}{-1+1}$ $f(x) = \frac{x-1}{x+1}$ $f(1) = \frac{1-1}{1+1} = 0$ $f(-1) = \frac{-1-1}{-1+1}$	6
$-1 = 1 - 2x \rightarrow x = 1 \quad (1) \rightarrow f(1) = \frac{1}{1+1} = 1$ $3 = 1 - 2x \rightarrow x = -1 \quad (2) \rightarrow f(-1) = \frac{-1}{-1+1} = 1$	$f(1) + f(-1) = 1 + 1 = 2$	7
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