

۱۵۰، ۲۵۰

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره ۱... کلاس ۱۰۰

$g(x) \rightarrow Dg = 1$
 $f(x) \rightarrow x^2 + 2x + 1 \neq 0 \quad (x+1)(x+1) \neq 0$
 $D_f = R \quad R \neq 1$
 $f(x) = \sqrt{x+1} \rightarrow x \geq -1$
 $g(x) = x \rightarrow R$
 $f(x) \neq g(x)$

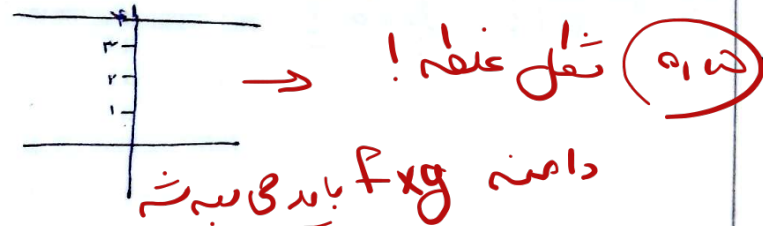
$f(x) = \frac{x}{|x|} \quad R - \{0\}$
 $g(x) = \frac{|x|}{x} \rightarrow R - \{0\}$
 $D_f = D_g$
 $D_f = R \quad D_g = R$

$f(x) \rightarrow \frac{x^2}{x^2+1} = \frac{1}{1+\frac{1}{x^2}}$
 $D_f = R - [0, \infty)$
 $g(x) = \frac{1}{x} \Rightarrow [x] \neq 0 \quad D_g = R - \{0\}$

$f(x) = \frac{1}{\sqrt{x-|x|}} \quad x-|x| > 0$
 $g(x) = \frac{1}{\sqrt{|x|-x}} \quad |x| > x$
 $D_f = (0, \infty)$
 $D_g = (-\infty, 0)$

$f(x) + g(x) = x^2 + x + 1$
 $f(x) - g(x) = x^2 - x + 1$
 $2f(x) = 2x^2 + 2 \Rightarrow f(x) = x^2 + 1$
 $g(x) = x$

$f \circ g = (x - \sqrt{x^2 - 4})(x + \sqrt{x^2 - 4}) = x^2 - (x^2 - 4) = 4$
 $\Rightarrow 4$



$g(x) = \frac{x-b}{2x^2-3x-4} \neq x = \frac{ax+2}{x^2-mx+n}$
 $a=1, b=-2$
 $x^2-3x-4 = x^2-mx+n$
 $m=3, n=-4$
 $a \cdot m - b \cdot n = 1 \cdot 3 - (-2 \cdot -4) = -5$

فقط دانش‌آموزان نسبت ضابطه جدید مورد

$$f(x) = \frac{bx+r}{1x+b} = 1x+b \neq 0 \quad x \neq -\frac{b}{1} = a$$

$$f(x) = c \quad b \xrightarrow{-\varepsilon} x+r \rightarrow a = \frac{1}{r} \frac{b-1}{r}$$

$$c = \frac{f+r}{1+f} = \frac{1}{r} \quad b \quad c = \frac{-\varepsilon+r}{1-\varepsilon} = -\frac{1}{r}$$

$$\frac{ab}{c} \begin{cases} \xrightarrow{-\frac{1}{r} \times f} = -f \\ \xrightarrow{\frac{1}{r} \times -f} = f \end{cases}$$

$$f = \{(-1, r), (r, f), (r, -r), (0, 0, d)\}$$

$$\frac{rg}{g+f} = \frac{(r, g), (r, 1), (-1, -1), (d, 0)}{(r, 1), (-1, -r), (r, f)} = \{(r, f), (r, 1), (r, r)\}$$

$$g(x) = \{(r, -1), (-r, 1), (a-rb, d)\} \quad f_x = \{(r, a), (-r, ra-rb), (c, d), (r, d)\}$$

$$a = -1 \quad ra-rb = 1 \quad c = d \quad d = -1$$

$$d + c = -1 + d = f$$

$$x = \frac{1}{r} \quad 2x + x - m = 0 \quad -x + x - m \geq 0 \quad m = 0/r$$

$$a+b = \frac{1}{r} + 0 = \frac{1}{r}$$

$$b = 9 \quad \frac{rx+a}{2x^2+4x+9}$$

$$\Rightarrow a = 9$$

$$\frac{rx+9}{(2x^2+4x+9)r} = \frac{r}{2x+r}$$

$$\frac{r}{2x+r} = \frac{r}{2x-c}$$

$$c = -r$$

$$9+9-r = 18$$