بابای جانم

$fog \to f g(m)$ $\quad fog = \{(4,a)(2,a)(9,12)(8,12)\}$

$4 \to 9 \to a$

$2 \to 4 \to a$

$9 \to 8 \to 12$

$8 \to 10 \to 12$

$gof \rightsquigarrow g(fx) \to \phi$

$4 \to a$

$9 \to a$

$8 \to 12$

$10 \to 12$

$fof \to f(fx) \to \phi$

$4 \to a$

$9 \to a$

$8 \to 12$

$10 \to 12$

$gog \to g(gx) \rightsquigarrow gog = \{(4,8)(2,9)(9,10)\}$

$4 \to 9 \to 8$

$2 \to 4 \to 9$

$9 \to 8 \to 10$

$8 \to 10 \to x$

@

$f(gx)$ $(a,2)$

$1 \longrightarrow 2 \longrightarrow 1$

$3 \longrightarrow 1 \longrightarrow 7$

$a \longrightarrow 3 \longrightarrow 2$

$b \longrightarrow 1 \longrightarrow 7$

$b=3$ $b=3$

$\frac{b=7}{3,7}$ $(2,3)$

$\frac{3,7}{2}$

$a=2$

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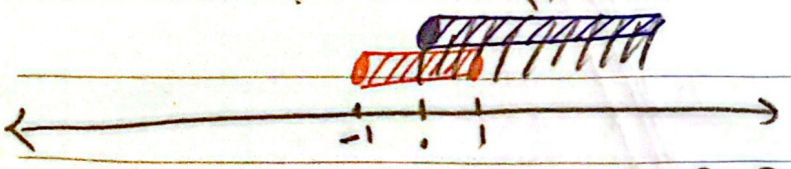
$f(x)=\sqrt{1-x^2}$, $g(x)=\sqrt{x}$ -۷

$x \geq 0$

$1-x^2 \geq 0$

$-1 \leq x \leq 1$

$x^2 \leq 1$



$D_g \cap D_f = [0,1]$

$0, 1$

$\sqrt{1-(0)^2} = \sqrt{1} = 1$

$\{0,1\}$

$\sqrt{1-(1)^2} = \sqrt{0} = 0$

$f\left(\frac{3x+1}{x-2}\right) = 4x+5$ — 9

$4\left(\frac{3x+1}{x-2}\right)+5$

$\frac{12x+4}{x-2} + \frac{5x-10}{x-2} \longrightarrow \frac{17x-6}{x-2}$

$g(x)\sqrt{1-x^2}$, $f(x) = \sin x$ — 8

$g(f(x))$ $\qquad \sin 45 = \frac{\sqrt{2}}{2}$

$1-\left(\frac{\sqrt{2}}{2}\right)^2 \longrightarrow$

$\sqrt{\frac{4}{4}-\frac{2}{4}} = \sqrt{\frac{2}{4}} \qquad \frac{\sqrt{3}}{2} \times \frac{\sqrt{2}}{2} = \frac{2}{4} = \frac{1}{2}$

$\frac{\sqrt{2}}{1-\sqrt{2}}$ جزء صفر (-1) $f(g(x))$ — 7

$(+)_{sc}$

$\int_0$ $\qquad \sqrt{2}+1-1$

$f\left(\frac{\sqrt{2}}{1-\sqrt{2}}\right) = \left[\frac{\sqrt{2}}{1-\sqrt{2}}\right]$

$\left[\frac{1}{1-\sqrt{2}}\right]-1 =$ $\qquad -1\ \frac{\sqrt{2}+1}{1-\sqrt{2}} + \frac{1}{1-\sqrt{2}}$ $\qquad \frac{1}{1-\sqrt{2}} - 1$