

Komposisi Fungsi

Nama :

Kelas :



Masalah 1

Lengkapi lah tabel berikut!

x	$g(x)$
3	10
4	
5	26
6	
7	
8	
9	82

$g(x)$	$f(g(x))$
10	
17	90
26	
	190
	255
82	

x	$f(g(x))$
4	90
9	

Masalah 2

Jika $f(x) = \frac{1}{2x}$ dan $g(x) = 2x + 3$, tentukan :

$$(f \circ g)(x) = f(\dots(x))$$

$$= f(\dots + 3)$$

$$= \frac{\dots}{\dots(2x+\dots)}$$

$$= \frac{1}{\dots x + \dots}$$

$$(f \circ g)(-3) = \frac{1}{4(\dots) + \dots} = \frac{\dots}{\dots}$$

Masalah 3

Jika $f(x) = \frac{1}{(2x+1)}$ dan $g(x) = 2x^2 + 1$. Tentukan

$$(f \circ g)(x) = f(g(x))$$

$$= f(\dots x^2 + 1)$$

$$= \frac{\dots}{\dots(\dots x^2 + 1) + \dots}$$

$$= \frac{1}{\dots x^2 + \dots + 1}$$

$$= \frac{1}{\dots x^2 + \dots}$$

$$(g \circ f)(x) = g(f(x))$$

$$= g\left(\frac{1}{\dots + \dots}\right)$$

$$= \dots \left(\frac{1}{2x+\dots}\right)^{\dots} + 1$$

$$= 2\left(\frac{1}{\dots x^2 + \dots x + 1}\right) + 1$$

$$= \frac{\dots}{\dots x^2 + \dots x + 1} + 1$$

$$= \frac{2}{4x^2 + 4x + 1} + \frac{\dots x^2 + \dots x + \dots}{\dots x^2 + \dots x + \dots}$$

$$= \frac{\dots (4x^2 + 4x + 1)}{4x^2 + 4x + 1}$$

$$= \frac{\dots x^2 + \dots x + \dots}{4x^2 + 4x + 1}$$