

## Função Composta

Sendo  $f(x) = 4x + 2$  e  $g(x) = 2x - 5$ , determine:

a)  $f(g(x)) =$   
 $f(x) = 4x + 2$        $g(x) = 2x - 5$

$$f(g(x)) = 4 \cdot (2x - 5) + 2$$
$$f(g(x)) = 8x - 18$$

b)  $gof(x) =$   
 $g(x) = 2x - 5$        $f(x) = 4x + 2$

$$gof(x) = 2(4x + 2) - 5$$
$$gof(x) = 8x - 1$$

c)  $fof(x) =$   
 $f(x) = 4x + 2$        $f(x) = 4x + 2$

$$fof(x) = 4(4x + 2) + 2$$
$$fof(x) = 16x + 10$$

d)  $g(f(5)) =$   
 $g(x) = 2x - 5$        $f(x) = 4x + 2$

$$gof(x) = 2(4x + 2) - 5$$
$$gof(x) = 8 \cdot 5 - 1 = 39$$