

If  $f(x) = 3x$  and  $g(x) = x - 4$

$$f(x) - g(x) = 3x - (x - 4)$$

$$= 2x + 4$$

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

$$(f - g)(3) = 2(3) + 4 = 10$$

$$(f - g)(x) = f(x) - g(x)$$