

Chapter 10 Review

Sum of Functions

$$h(x) = f(x) + g(x) \quad \text{This can also be written as } h(x) = (f + g)(x).$$

Difference of Functions

$$h(x) = f(x) - g(x) \quad \text{This can also be written as } h(x) = (f - g)(x)$$

Product of Functions

$$h(x) = f(x)g(x) \quad \text{This can also be written as } h(x) = (f \bullet g)(x)$$

Quotient of Functions

$$h(x) = \frac{f(x)}{g(x)} \quad \text{This can also be written as } h(x) = \left(\frac{f}{g}\right)(x), \quad \text{where } g(x) \neq 0$$

We can substitute one function, $f(x)$, into another function, $g(x)$. The result would be $g(f(x))$.

This is read “ g of f of x ”.

The notation for this function composition is $(g \circ f)(x)$...**not to be confused with multiplication** which is $(g \bullet f)(x)$.