

# OPERATIONS WITH FUNCTIONS

## Adding Functions

$$(f+g)(x) = f(x) + g(x)$$

## Subtracting Functions

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

## Multiplying Functions

$$(f \cdot g)(x) = [f(x)][g(x)]$$

## Dividing Functions

$$(f/g)(x) = f(x)/g(x)$$

Let  $f(x) = x - 5$  and  $g(x) = x^2 - 2x - 15$ .

**Adding Functions**

$$(f+g)(x) = f(x) + g(x)$$

Find  $(f+g)(x)$ .

Let  $f(x) = x - 5$  and  $g(x) = x^2 - 2x - 15$ .

**Multiplying Functions**

$$(f \cdot g)(x) = [f(x)][g(x)]$$

Find  $(f \cdot g)(x)$ .

**Subtracting Functions**

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

Find  $(g-f)(x)$ .

**Dividing Functions**

$$(f/g)(x) = f(x)/g(x)$$

Find  $(f/g)(x)$ .