The Constant Rule The derivative of a constant function is zero. $\frac{d}{dx}[c] = 0$	**The Power Rule** If n is a rational number, then the function $f(x) = x^n$ is differentiable and… $\frac{d}{dx}[x^n] = n \cdot x^{n-1}$
The Constant Multiple Rule If f is a differentiable function and c is a real number, then $c \cdot f$ is differentiable and… $\frac{d}{dx}[c \cdot f(x)] = c \cdot f'(x)$	**The Sum and Difference Rules** The sum (or difference) of two differentiable functions, f and g, is differentiable and… $\frac{d}{dx}[f(x) \pm g(x)] = f'(x) \pm g'(x)$