Integration	
The Fundamental Theorem of Calculus	$\int_{a}^{b} f(x) dx = F(b) - F(a)$
The Second Fundamental Theorem of Calculus	$\frac{d}{dx} \int_{a}^{x} f(t) dt = f(x)$ $\frac{d}{dx} \int_{a}^{g(x)} f(t) dt = f(g(x))g'(x)$ $\frac{d}{dx} \int_{g(x)}^{h(x)} f(t) dt = f(h(x))h'(x) - f(g(x))g'(x)$