

Name: \_\_\_\_\_  
AP Calculus AB

Date: \_\_\_\_\_  
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### Fundamental Theorem of Calculus Part I:

If a function  $f$  is continuous on an interval  $[a,b]$ , then it follows that

$$\int_a^b f(x)dx = F(b) - F(a) \text{ where } F \text{ is a function such that } F'(x) = f(x)$$

( $F$  is any antiderivative of  $f$ ).