## Review of the Fundamental Theorem of Calculus

Remember that the First Fundamental Theorem of Calculus (FTC1) said that if $F^{\prime}=f$, then $\int_{a}^{b} f(x) d x=F(b)-F(a)$.

We used this to evaluate definite integrals; today we're going to reverse that and read the equation backward:

$$
F(b)-F(a)=\int_{a}^{b} f(x) d x
$$

and use the derivative $f=F^{\prime}$ to understand the function $F$.

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### 18.01SC Single Variable Calculus] []

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