

The fundamental theorem again

Revisit former version of the fundamental theorem of calculus.

$$\int_a^b f(x)dx = F(b) - F(a)$$

$$\text{if } A(x) = \int_a^x f(t)dt \text{ then } A'(x) = f(x)$$

find $F'(x)$ given $F(x) = \int_1^x t^2 dt$