Facts to Know:

Derivative formula for composition of functions.

Chain Rule 1: \( \frac{df}{dx}(g(x)) = \)

Chain Rule 2: \( y = f(u) \) and \( u = g(x) \), \( \frac{dy}{dx} = \)

Examples:

1. Find the derivative of \( y = e^{6x} \).

2. Find the derivative of \( y = \sin^3(2x) \).