Vocabulary/Definitions

- The Chain Rule
- Interpreting the chain rule in practical terms

Understand

1. If we write \( y = (3x - 4^x)^2 \) as \( y = f(z) = f(g(x)) \), what are \( f(z) \) and \( z = g(x) \)?

2. Find \( \frac{dy}{dx} \) if \( y = (3x - 4^x)^2 \).

3. If we write \( y = 2^e^x \) as \( y = f(z) = f(g(x)) \), what are \( f(z) \) and \( z = g(x) \)?

4. Find \( \frac{dy}{dx} \) if \( y = 2^e^x \).