$$\frac{d}{dx}\left[f(x)\cdot g(x)\right] = f'(x)\cdot g(x) + f(x)\cdot g'(x)$$

The Product Rule:

The derivative of a product is the derivative of the first factor, times the second factor, plus the first factor times the derivative of the second factor.

$$\frac{d}{dx}\left[\frac{f(x)}{g(x)}\right] = \frac{f'(x)\cdot g(x) - f(x)\cdot g'(x)}{(g(x))^2}$$

Quotient Rule: The derivative of a quotient is the derivative of the Numerator, times the denominator minus the numerator times the derivative of the denominator, all divided by the denominator squared.

Use these!