Chain Rule

$$\frac{d}{dx} f(g(x)) = f'(g(x)) \cdot g'(x)$$

$$\frac{d}{dx} \left(x + \tan(x) \right)^3$$

inside: $x + \tan(x)$

outside: ~~x^3~~ x^3

inside': $1 + \sec^2(x)$

outside': $3x^2$

$$= 3 \cdot \left(x + \tan(x) \right)^2 \cdot \left(1 + \sec^2(x) \right)$$