

NMSI Calculus

Computing Derivatives Part 2

Trigonometric functions

$$\frac{d}{dx}(\sin(x)) =$$

$$\frac{d}{dx}(\cos(x)) =$$

The Product Rule

$$d(f(x) \cdot g(x)) =$$

The Quotient Rule

$$d\left(\frac{f(x)}{g(x)}\right) =$$

Examples

1. $y = x^3 \sin(x)$

2. $y = \sin(x) \cdot \cos(x)$

3. $y = x^2 \sin(x) \cdot \cos(x)$

4. $y = \frac{\sin(x)}{x}$

5. $y = \tan(x)$

6. $y = \sec(x)$