

More Examples of Derivatives

Problems

$$\frac{d}{dx} e^{\sqrt{x}}$$

$$\frac{d}{dx} (x^2 + 1) \sqrt[3]{x^2 + 2}$$

$$\frac{d}{dx} \sqrt{x + \sqrt{x + \sqrt{x}}}$$

$$\frac{d}{dx} (4x - x^2)^{100}$$

$$\frac{d}{dx} e^{x \cos(x)}$$

$$\frac{d}{dx} x \sin\left(\frac{1}{x}\right)$$

$$\frac{d}{dx} (2x - 5)^4 (8x^2 - 5)^{-3}$$

$$\frac{d}{dx} \sqrt{\frac{x-1}{x+1}}$$

$$\frac{d^{50}}{dx^{50}} \cos(2x)$$

$$\frac{d}{dx} x e^{-kx}$$

$$\frac{d}{dx} [x + (x + \sin^2(x))^3]^4$$

$$\frac{d^{1000}}{dx^{1000}} x e^{-x}$$

Questions?