

Calculate the following derivatives:

$$\frac{d}{dx} \sin(3x) = \cos(3x) \cdot 3$$

$$\frac{d}{dx} \cos(4x)$$

$$\frac{d}{dx} \tan(5x)$$

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

$$\frac{d}{dx} \sin(3x^4)$$

$$\frac{d}{dx} \tan(x^4+2)$$

$$\frac{d}{dx} \cos(3x^{10})$$

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

$$\frac{d}{dx} \sec(x^2+2x+3)$$

$$\frac{d}{dx} \cot(x^4)$$

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

$$\frac{d}{dx} 4 \tan(\sec x)$$

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

$$\frac{d}{dx} (\sec x)^3$$

$$\frac{d}{dx} \sec^4(x)$$

$$\frac{d}{dx} \csc^4(x)$$

$$\frac{d}{dx} 4\sqrt{\cos(x)}$$

$$\frac{d}{dq} \sec(\sin(q))$$

$$\frac{d}{dr} \cos(\tan(r))$$

$$\frac{d}{dy} (\cos(y))^4$$

$$\frac{d}{dr} \sin(\cos(r^2 + 3r))$$

$$\frac{d}{dr} \tan(\sqrt[3]{\sin(r)})$$

$$\frac{d}{ds} \sqrt[3]{\sec(\tan(r))}$$

$$\frac{d}{dx} \sin(\sqrt{\cos x})$$