

Name:

Quiz #6 - October 17, 2007

Find $\frac{dy}{dx}$

a. $y = e^{5x}$

$$\frac{dy}{dx} = 5e^{5x}$$

b. $y = \tan(1 + x^2)$

$$\frac{dy}{dx} = 2x \sec^2(1 + x^2)$$

c. $y = \sqrt{x} \cos(\pi x)$

$$\frac{dy}{dx} = \frac{1}{2\sqrt{x}} \cos(\pi x) + \sqrt{x}(-\pi \sin(\pi x)).$$