
Name: _____

QUIZ 9 ◇

MATH 200
February 12, 2026

1. In this problem $y = x^3 + \frac{1}{x}$.

(a) $\frac{dy}{dx} =$

(b) $\frac{d^2y}{dx^2} =$

(c) $\frac{d^3y}{dx^3} =$

2. $D_x \left[\cos(e^x) \right] =$

3. $D_x \left[\tan \left(\frac{x^5 + 1}{5x} \right) \right] =$

4. $D_x \left[\sec(x^5 + x) \right] =$

Name: _____

QUIZ 9 ♣

MATH 200
February 12, 2026

1. In this problem $y = x^2 + \frac{1}{x^2}$.

(a) $\frac{dy}{dx} =$

(b) $\frac{d^2y}{dx^2} =$

(c) $\frac{d^3y}{dx^3} =$

2. $D_x \left[\csc(e^x) \right] =$

3. $D_x \left[\cot(x^5 + x) \right] =$

4. $D_x \left[\sin\left(\frac{x^5 + 1}{5x}\right) \right] =$