

## QUIZ 1

Your name \_\_\_\_\_

1. Find  $f'(x)$  if  $f(x) = (e^{4-3x} + \sec x)^2$ .

2. Find  $\frac{dy}{dx}$  if  $y = \frac{\cos 2x}{x^4 + 5}$ .

3. Find the slope of the curve  $y = x^{3/2} \sin(2x - 8)$  at  $x = 4$ .

**Problems 4 and 5 are on the back side.**

4. A particle moves on the  $x$ -axis with velocity  $v(t) = 6t^2 - \frac{4}{t^2}$ . If it is located at  $x = 0$  at time  $t = 1$ , where is it at time  $t = 2$ ?

5. Find  $g(x)$  if  $g'(x) = 3 \sin x + 4e^x + 5$  and  $g(0) = 0$ .