

Name: \_\_\_\_\_

Math 105B: Winter 2013

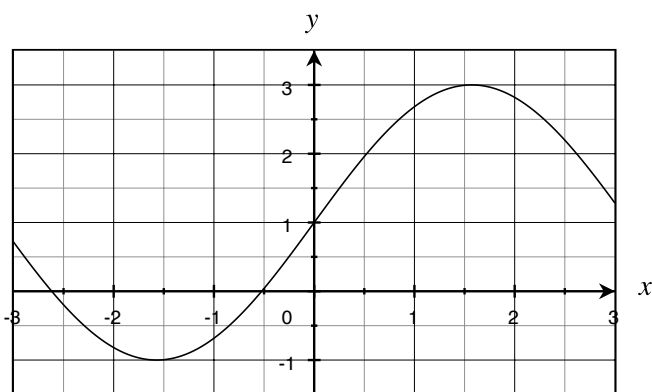
Quiz 5: March 1

Correct answers accompanied by incorrect or incomplete work will not receive full credit. Good Luck!

1. Compute the derivative of  $h(t) = \frac{1 - t^2}{\ln t}$ .

2. Suppose that

- $f(0) = 3$
- $f'$  is shown below
- $g(x) = 5 \sin(x)f(x)$



Evaluate  $g'(0)$ .

3. Determine whether  $F$  is an antiderivative of

$$f(x) = x^2 \sin(2x^3), \quad F(x) = \cos(2x^3)$$

4. Compute the derivative of  $p(x) = (2^x + \ln(3x^2 - 4x))^{100}$