

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

## Quiz 3

Math 251

You have 20 minutes to complete **both sides** of this quiz. When you're finished, first check your work if there is time remaining, then turn it in. You may use your class notes (i.e. not the online notes), and a scientific calculator, but not a graphing one. You may not consult other people or the internet. **Show all your work.**

1. (4 points) If  $R(x)$  is a function giving the revenue from selling  $x$  items, then what is the definition of  $MR(x)$  and what is its interpretation in terms of revenue? Your answer should be an equation for the definition and a sentence for the interpretation.

2. (8 points) Let  $f(t) = \frac{\tan(t)}{t}$ . What is  $f'(t)$ ?

- 3.** (8 points) Let  $g(x) = \sin(x) \cos(x)$ . Find  $g'(x)$ .