Written Assignment 3
Due Monday, October 15th

Part 1

Directions: if you calculate a derivative in this part of the assignment you must use the definition of the derivative.

1. (a) # 5, (b) # 6 in Chapter 2.4.
2. # 18 in Chapter 2.4.
3. (a) # 20, (b) # 22 in Chapter 2.4.
4. Find the equation of the tangent line to $f(t) = \frac{1}{t}$ at $t = -2$. Use the limit definition of the derivative.
5. Find the derivative function of $g(t) = \sqrt{t}$ using the limit definition. (Hint: remember the rationalize trick from homework 2.)
6. Find the derivative function of $R(t) = t^3$ using the limit definition.

Part 2

Directions: In this part, you may use any technique or shortcut to finding the derivative.

7. Chapter 2.4, (a) # 36, (b) # 38
8. Chapter 2.6 (a) # 2, (b) # 4, (c) # 6.
9. Chapter 2.6, (a) # 8, (b) # 10, (c) # 12
10. Chapter 2.6 # 24 (Write a sentence or two at the end summarizing your results of this problem.)
11. Chapter 2.6 # 36 (Write a sentence like above.)

Practice Problems

Directions: don't turn these ones in. Just do them for practice.

- Chapter 2.6 # 1, 3, 5, 7, 9, 11