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

**October 3rd, 2012**

**AP Calculus 1, Mrs. Sulkes**

**Review for Test #3 Q1**

This test will cover the following topics:

* Limits
* Continuity
* Intermediate Value Theorem
* Limit Definition of a Derivative
* Tangent lines (equation of)
* Differentiability
* Derivatives – Shortcut Rules
* Graphs of Derivatives

\*In addition to this review, I suggest you study all homework problems, handouts, and previous quiz/test.

**Part 1.** Find my derivative.

1. 

1. 

1. 
2. 

**Part 2.** **Remember Me!**

Find: 

**Part 3.** **Apply the Derivative.**

Let y = , write an equation for the tangent line at x = 2. (You will have to use the limit definition of the derivative to find ).

**Part 4.** **Thinking about the meaning of derivative.**

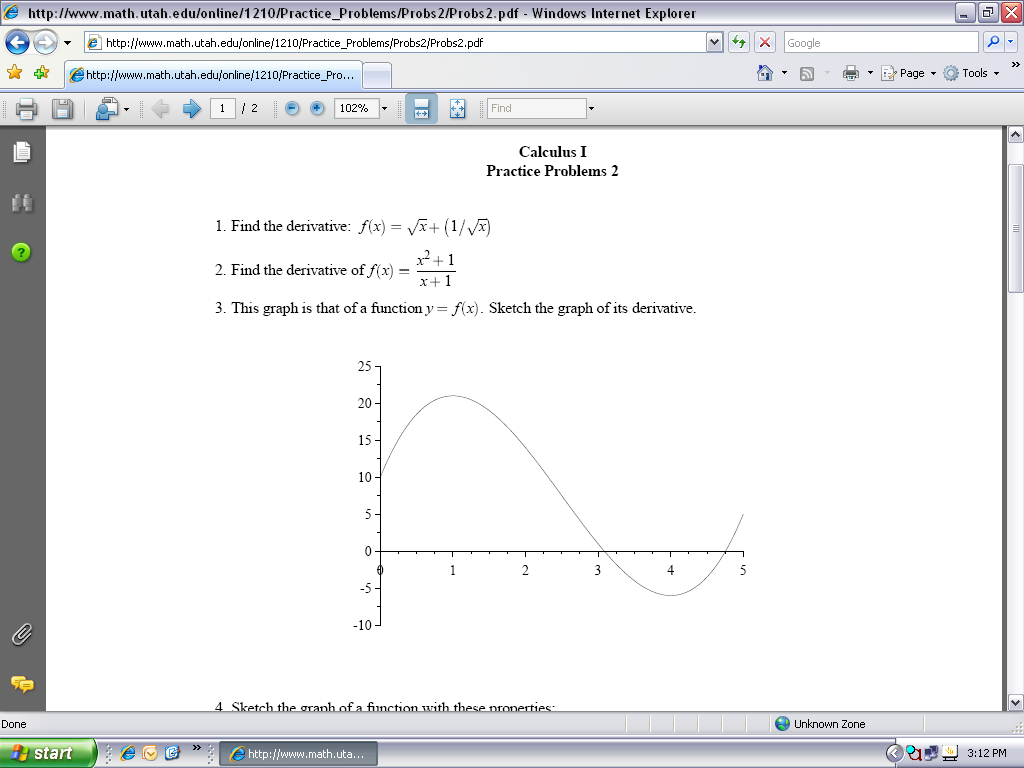
Sketch the graph of a function with these properties:

*f*(0) = 2 and *f*(1) = 0

(x) < 0 for 0 < x <2

(x) > 0 for x < 0 or x > 2

**Part 5.** **Thinking about derivatives.**



**Part 6. Other good review problems**

p. 111 #9, 45, 55, 57, 69, 73, 77 and p. 197 #1, 7, 9, 13, 25, 27