**Derivatives Quiz Study Guide**

**Format:** 10 multiple choice questions with no calculator for 30 minutes (3 mins. per question)

*On the AP test you get 2 mins per question when you have no calculator, so I am being nice and giving you more time than you would get on the AP test.*

**Topics:**

* Given a piecewise function find a limit, find a function value, and determine if the function is continuous at that point (2.3 Continuity, AP2-1 #1)
* Given a piecewise function solve for a value to make the function continuous at a given point (2.3 Continuity worksheet #4 – 7, pg. 89: #57-59)
* Quotient rule (3.3 Derivatives, see later point)
* Derivative rules with tables (3.3 Derivatives, Pg. 147-149: #40 – 42, Pg. 205: #85-87)
* Determine when a particle is at rest or stopped (3.4 Rates of Change, study powerpoint)
* Determine the meaning of the difference quotient (2.4 and 3.1, pg. 203 #13-16)
* Given a graph state the points where the function is not differentiable (pg. 142: #77-82)
* Product rule with sine or cosine included (3.6 Trig Derivatives, see later point)
* Quotient rule with sine or cosine included (3.6 Trig Derivatives, see later point)
* Product rule and Quotient rule problems to study: pg. 147: #1, #2, #5, #7-10
* Sine and Cosine problems to study: pg. 167: #5-7, #12, #17-18

So for this quiz you should have all the derivative rules from 3.3 memorized and derivative of sine and cosine memorized. For the test over derivatives you will have to all of the derivative rules memorized. **This gives you time to memorize the derivative rules. See I am super nice right?**