Name: _____

Block: _____

**Chapter 3 Self-Assessment**

Emerging: I am starting to understand the ideas
Developing: I am understanding many of the ideas but I make errors
Proficient: I have a complete understanding of the skills and concepts
Extending: I am pushing my learning to connect to advanced problems and ideas

| Section | | Level of comprehension | Assignment Completed |
|---|---|---|---|
| 3.1 | • I can find the derivative at a point by using the definition of a Derivative (limit process)<br>• I can write the equation of a tangent line at a given point | | |
| 3.2 | • I can find the derivative of a function using the Definition of a derivative (limit process)<br>• I can use the Power rule for finding derivatives (short cut)<br>• I can find horizontal tangent lines using the derivative | | |
| 3.3 | • I can find the derivative of Products and Quotients | | |
| 3.4 | • I know the difference between average rate of change and instantaneous rate of change<br>• I can use the formula for Position of a free falling object and find velocity | | |
| 3.5 | • I can find higher order derivatives | | |
| 3.6 | • I know the derivative of all six trig functions or I can create them from the derivative of sin and cos | | |
| 3.7 | • I can use the chain rule to find derivatives of composite functions<br>• I can simplify functions after using the chain rule by factoring out the least power<br>• I can apply the chain rule to trig functions<br>• I can find equations for tangent lines | | |
| 3.8 | • I can find a derivative using Implicit differentiation<br>• I can find conditions on x or y for horizontal tangents lines | | |

| | | | |
|---|---|---|---|
| 3.9 | • I can use implicit differentiation to solve related rates problems<br>• I can write my solution with the appropriate units | | |

| Work Habits | G<br>100% to 80% of the time | S<br>80% to 60% of the time | N<br>less than 60% of the time |
|---|---|---|---|
| Assignments completed and handed in on time | | | |
| Arrive to class on time | | | |
| Return after break on time | | | |
| Work on the math assignment during class | | | |
| Phone use limited to checking math answer keys posted on the website | | | |
| If absent:<br>watching the lesson video or reading the lesson notes | | | |

Outline the steps required to find the equation of a tangent line given a function and an x-value

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Outline the steps required to solve a related rates problem

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