AP Calculus AB – 2nd Quarter Assessment Grades Name: _____

Most recent grade entered in Powerschool. Each standard is assessed at least twice. Re-taking an assessment requires proof of completed homework.

Full state standards on web at: http://j.mp/tenncalc AP Course Description: http://bit.ly/apcalcabcd

D-AD2: Basic Derivatives: I can calculate the derivative of basic functions (power, exponential, and trigonometric).

Date					
Score					

D-AD2b: Advanced Derivatives: I can calculate the derivative of advanced functions (inverse trig, logarithmic, and chain rule versions of basic derivatives).

Date					
Score					

D-AD3: Product and Quotient Rules: I can calculate the derivatives of sums, products, and quotients of a variety of functions.

Date					
Score					

D-AD4: Chain Rule: I can apply the chain rule to find the derivative of a composite function from a table, graph, and algebraically.

Date					
Score					

D-CD2: Instantaneous Rate of Change: I can interpret the derivative as an instantaneous rate of change in applied contexts.

Date					
Score					

D-CD4: Differentiability: I can demonstrate understanding of differentiability, including finding non-differentiable points graphically and algebraically, as well as finding values to make a function differentiable.

Date					
Score					

D-CD5: Horizontal and Vertical Tangents: Given a function, I can algebraically find points where the graph has horizontal and vertical tangents.

Date					
Score					

D-CD6: Table Derivatives: I can approximate both the instantaneous rate of change and the average rate of change given a graph or table of values.

Date					
Score					

D-CD7: Writing A Tangent Line: I can write the equation of the line tangent to a curve at a given point.

Date					
Score					

D-AD18: Linear Approximation: Use tangent lines to approximate function values and changes in function values when inputs change

Date					
Score					

D-CD8: MVT: I can apply the Mean Value Theorem both graphically and algebraically.

Date					
Score					

D-AD17:P-V-A: I can use differentiation to solve problems involving velocity, speed, and acceleration.

Date					
Score					

D-AD0: L'Hopital's Rule: I can use L'hopital's rule to evaluate limits that result in indeterminate forms.

Date					
Score					

D-AD5: Implicit Differentiation: I can implicitly differentiate an equation in two or more variables.

Date					
Score					

D-AD6: Inverses: I can use implicit differentiation and chain rule to find the derivative of the inverse function.

Date					
Score					

D-AD14: Words to Derivatives: I can translate verbal descriptions into equations of derivatives and vice versa.

Date					
Score					

D-AD15: Related Rates: I can model relationships among rates of change, using implicit differentiation to find a missing rate including the correct unit.

Date					
Score					

D-AD7: F and F-Prime: I can relate the increasing and decreasing behavior of f to the sign of f ' both analytically and graphically and in both directions.

Date					
Score					

D-AD8: First Derivative Test: I can use the first derivative to find and justify local and absolute extrema.

Date					
Score					

D-AD9: Intervals of Increasing and Decreasing: I can analytically locate the intervals on which a function is increasing, decreasing or neither.

Date					
Score					

D-AD10: F and F-Double Prime: I can relate the concavity of f to the sign of f " both analytically and graphically and in both directions.

Date					
Score					

D-AD11: Inflection Points: I can use the second derivative to find points of inflection as points where concavity changes.

Date					
Score					

D-AD12: Concavity: I can algebraically find where a function is concave up, concave down or neither.

Date					
Score					

D-AD13:Matching F-F'F": Relate corresponding characteristics of the graphs of f, f ' and f "

Date					
Score					

In Powerschool: 4: 96 3: 86 2:66 1: 50 0:0 (no attempt made)

Two consecutive 4's on first two attempts yields a 5: 100