

Chapter 4 (Unit 4) Test

Date: _____

Self-Reflection for Studying for Test

Check off your answer to each question:

	Yes	Somewhat	No
Did you complete all HW?			
Did you correct any HW errors and complete any missing problems?			
Did you attend study groups every week?			
Did you ask questions in your study group on topics?			
Did you correct any Quiz errors?			

Rate your preparation for each of these topics on a scale of 0 to 5, where 0 is not at all prepared and 5 is well-prepared.

If you are not well-prepared for a topic, identify what can help you prepare for the Test (i.e., your notes, homework, mathkanection, Khan Academy, or other resources)

Topic	0	1	2	3	4	5	What to do to be better prepared
<i>Using the Mean Value Theorem</i> I can draw conclusions about where the instantaneous rate of change equals the average rate of change over an interval and justify these conclusions using the Mean Value Theorem.							
<i>Extreme Value Theorem, Global versus Local Extrema, and Critical Points</i> I can draw conclusions about a function having at least one minimum and one maximum value on an interval and justify these conclusions using the Extreme Value Theorem. I can find the critical points of a function.							
<i>Using the 1st Derivative Test to Determine Relative (Local) Extrema and Determine the Intervals where a Function is Increasing or Decreasing</i> I can use the 1 st derivative test to determine the behavior of a function, including, relative extrema and where the function is increasing or decreasing and justify these conclusions based upon the behavior of the function's derivative.							
<i>Using the Candidates Test to Determine Absolute (Global) Extrema</i> I can determine where absolute extrema on a closed interval occur by evaluating the critical points and the endpoints.							
<i>Determine Concavity of Functions over their Domain (Test for Concavity)</i> I can use the test for concavity to determine the behavior of a function, including, inflection points and where the function is concave up or concave down and justify these conclusions based upon the behavior of the function's 2 nd derivative.							

Topic	0	1	2	3	4	5	What to do to be better prepared
<p><i>Using the 2nd Derivative Test to Determine Extrema</i> I can use the 2nd derivative test to determine whether a critical point is the location of a relative (local) minimum or maximum and justify these conclusions based upon the behavior of the function's derivatives.</p>							
<p><i>Approximate Values of a Function Using Local Linearity and Linearization</i> I can use a tangent line to approximate the value of a function near the point of tangency and determine whether the tangent line value is an underestimate or an overestimate of the corresponding function's value.</p>							
<p><i>Solving Related Rates Problems</i> I can use the derivative to solve related rates problems; that is, find a rate at which one quantity is changing by relating it to other quantities who rates of change are known. I can interpret related rates in applied contexts.</p>							