Calculus Project – Test

Your job is to write a comprehensive calculus exam. It must be 15 questions long, and to make the grading easier, the answers must come out 0- 14 in that order. You must have:

- ➢ 1 limit as x approaches a constant
- ➢ 1 limit as x approaches infinity
- ➢ 1 power rule of derivatives
- ➢ 1 product rule of derivatives
- ➢ 1 quotient rule of derivatives
- ➢ 1 chain rule
- ➢ 1 Riemann Sum (of any type).
- ➢ 1 Related Rate
- ➢ 1 Area using geometry/integration properties
- ➢ 1 Power Rule of Integration
- ➢ 1 U substitution for Integration
- ➢ 1 Differential equation (must include a separation of variables)
- ➢ 1 Area between two curves
- ➢ 1 Volume of known cross sections
- ➢ 1 Volume of rotation

You must type your test questions neatly using an equation editor.   The topics can be in any order, but the answer to problem #1 must be 0, problem #2 must be 1, etc. You may type your work, or handwrite it on your test. As part of your work, you must write which topic is being tested by that question. All problems must be worked without a calculator, and none of the answers can be rounded.

Problems that are "trick problems" will not be accepted. For example

$3+\int_{2}^{2}\sqrt{5x-3}dx=3$ cannot be used as your u-sub problem. Your u-sub problem must actually require the use of u-substitution.

Due Date: _____

(This is an absolute deadline. Projects may be turned in early.)

Calculus Project -TEST
Grading Rubric

Names:

Problem #	(5 each)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

Questions are typed using an equation editor (5)	
Work is neat and easy to follow (5)	
Rubric is attached to final project (5)	
Collaborative Work (out of 10)	
Total	