

141 - Calculus II: Test 1 Study Guide

Henson - Spring 2010

TEST 1 TOPICS:

1. Inverse trig derivatives (given a table)
2. Inverse trig integrals (given a table)
3. Hyperbolic function definitions
4. Hyperbolic derivatives/integrals (given a table)
5. Graphing slope fields
6. Sketching a solution to a D.E. in a slope field given initial conditions
7. Numerically approximating a D.E. solution using Euler's Method
8. Solving growth/decay D.E. (Newton's law of cooling, radioactive decay, etc.)
9. Determining if a D.E. is separable
10. Solving D.E.'s using the 'separation of variables' technique
11. Determining if a D.E. is a homogeneous equation
12. Solving a homogeneous D.E.
13. Solving linear, 1st order D.E.'s (use $\mu(x)$)
14. Be able to compute the appropriate choice for $\mu(x)$