Final Review Sheet

*****PRACTICE FOR THE FINAL BY TAKING ALL THE EXAMS ON MY WEBSITE (www4.ncsu.edu/~lakurtz)*****

LIMITS: p. 102 #5 Looking at a graph
p. 111 # 9,19,21,27,29 Limit laws/Squeeze Theorem
p. 121 # 3 Continuity
p. 133 #3,15,29 Vertical/Horizontal Asymptotes
p. 296 # 11,19, 31,39,41 L'Hospital's Rule

DERIVATIVES: p. 146 Definition of a derivative
p.156 # 19, 25,27 Finding derivatives using the definition
p. 157 # 35 Recognizing where a function isn't differentiable
p. 181 # 3,5,11,13,17
p. 189 # 3,7
p. 195 # 1,3,5,11
p. 205 # 1,3,5
p. 214 # 21,23 Finding the equation of a tangent line
p. 226 # 2,3,5
p. 248 # 2

RELATED RATES: Look at the problems on the Related Rates WS and P. 260 # 5,13,16

DERIVATIVES & THE SHAPES OF CURVES: p. 280 # 21,23 Expect a polynomial

OPTIMIZATION: Look at WS & p. 306 #11,12,14

INTEGRATION: p. 363 # 1,3,5 Definite Integrals
p. 373 # 7, 9,11 The Fundamental Theorem of Calculus
p. 381 # 11, 13, 24, 34,36,54 U-Substitution
p. 387 # 3,7,10,17 Integration By Parts; Know LIATE
p. 393 # 1, 3 Trig Integrals
http://www.stewartcalculus.com/data/CALCULUS%20Concepts%20and%20Contexts/upfiles/3c3-TrigonometIntegrals_Stu.pdf p. 6 #1-5
p. 394 #17 Trig Substitution
http://www.stewartcalculus.com/data/CALCULUS%20Concepts%20and%20Contexts/upfiles/3c3-TrigonometSubstitu_Stu.pdf p. 5 # 1-3
Partial Fractions (Cases 1-3), p. 394 # 21,23,24

ADDITIONAL INFO TO KNOW FOR THE FINAL: Know sin and cos of 0, pi, pi/2. Know tan of 0 and pi/4; Also know arc tan of 1 and 0. Know ln1=0