Review 3 Math 161

Any term in **bold face** know the definition well enough to state it on the test. The definition you give should be very similar to the one in the book or one with similar detail.

Section 4.1 **local max, local min, absolute max, absolute min, critical number/point**, Fermat's Theorem, Closed interval method

Sample problems: Example 8, exercise 31,39,49,53

Section 4.2 **Rolle's Theorem, Mean Value Theorem**, Be able to prove Theorem 5 and Corollary 7

Sample problems: 1,17,32

Section 4.3 **Increasing Test, First derivative Test, Concavity Test, Second Derivative Test, inflection point**

Sample problems: Example 6, Exercise 15,33,39

Section 4.4 **L'Hospital's Rule** indeterminant forms,

Sample problems: Example 6, Exercise 9, 19,51,53

Section 4.7

Sample problems: Examples 4,5, Excercise 7,11,14,25

Section 4.9 **Antiderivative**

Sample problems: Exercise 29, 38, 40, 45, 59, 63

Section 5.1/5.2 **Definite integral, Riemann Sum**, sigma notation, 5.2-Theorem 4 properties of integrals

Sample problems: Exercises **5.1** 3,11, **5.2** 17,21,55

Section 5.3 **Fundamental Theorem of Calculus Part 1 and II**

Sample problems: Exercises 9,13,17,19,27,38,39