

**Material covered in Math 249 L02 Fall 2007**  
**Section numbers refer to the Course Textbook, Calculus**  
**by H. Anton 8th Brief Edition**

Web Appendix A: Trigonometric Functions

Web Appendix D: Inequalities

Web Appendix E: Absolute value

Web Appendix F: Lines

Web Appendix G: Circles

1.1. Functions

1.3. New Functions from Old

1.5. Inverse Functions

1.6. Exponential and logarithmic functions

2.1., 2.2 Limits

2.3. Limits at Infinity and Infinite Limits. Asymptotes.

2.5. Continuity

2.6. Limits of trigonometric functions

3.1. The derivative

3.2. Geometric meaning of Derivative

3.3. Techniques of Differentiation

3.4. Product and Quotient Rules

3.5. Differentiation of Trigonometric Functions

3.6. Chain Rule

3.8. Linear Approximation

4.1. Implicit Differentiation

4.2. Derivatives of Logarithmic Functions

4.3. Derivatives of Exponential Functions

4.4. L'Hopital's Rule

5.1. Increasing and decreasing functions. Concavity

5.2. Relative Extrema

5.3. Graphing of Functions

5.4. Absolute Extrema

5.5. Applied Maxima and Minima

5.7. Mean Value Theorem

5.8. Rectilinear Motion

6.1., 6.2. Indefinite Integrals

6.3. Integration by Substitution

6.4., 6.5., 6.6. Definite Integral. Fundamental Theorem of Calculus.

6.5., 6.6. Definite Integrals

6.7. Rectilinear Motion.

6.8. Definite Integrals by Substitution.