

Topics of Final Exam (372) **MATH105**

Chapter 1: Limits and Continuity

Sec. 1.1 Limits (An Intuitive approach)

Sec. 1.2 Computing Limits

Sec. 1.3 Limits at Infinity

Sec. 1.5 Continuity

Sec. 1.6 Continuity of Trigonometric, Exponential and Inverse Functions

Chapter 2: The Derivative

Sec. 2.1: Tangent lines and Rates of Change.

Sec.2.2: The Derivative Function.

Sec.2.3: Introduction to Techniques of Differentiation.

Sec.2.4: The Product and Quotient Rules.

Sec.2.5: Derivatives of Trigonometric Functions.

Sec.2.6: The Chain Rule.

Chapter 3: Implicit Differentiation

Sec.3.1: Implicit differentiation.

Sec.3.2: Derivatives of Logarithmic Functions.

Sec.3.3: Derivatives of Exponential and Inverse Trigonometric Functions.

Sec.3.5: Local Linear Approximation; Differentials.

Sec.3.6: L'Hopital's Rule; Indeterminate Forms.

Good Luck