## MTH 1001 – Calculus 1

## **Study Topics**

Textbook: Calculus - Early Transcendentals, 8th ed., by James Stewart

- 2.2: Limits & Graphing
- 2.3: Limits & Equations
- 2.5: Continuity
- 2.6: Limits at Infinity
- 2.7: Rates of Change
- 2.8: Definition of Derivative
- 3.1: Power Rule & Exponent Rule
- 3.2: Product & Quotient Rules
- 3.3: Trig Derivatives
- Test 1
- 3.4: Chain Rule
- 3.5: Implicit Differentiation
- 3.5: Inverse Trigs
- 3.6: Log Derivatives
- 3.7: Linear Motion
- 3.9: Related Rates
- 3.11: Hyperbolic Trigs
- 4.4: L'Hôpital's Rule: Part 1
- 4.4: L'Hôpital's Rule: Part 2
- Test 2
- 4.1: Abs Max/Min
- 4.3: Using Calculus to Graph
- 4.5: Summary of Curve Sketching
- 4.7: Optimization
- 4.6: Graphing with Calculator
- 4.8: Newton's Method
- 4.9: Antiderivatives
- 5.1: Area Problem
- 5.2: Areas by Sigmas
- 5.3: Fundamental Theorem of Calculus
- 5.4: Indefinite Integral
- 5.5: Integration by Substitution

Test 3

FINAL EXAM