

Unit 1 - Pre-Calculus Review	48 Combination Rules - Part II
1 Parent Functions: $y = x^2$	49 Derivatives of Inverse Trigonometric Functions
2 Polynomial Functions: Power Functions: $y = ax^1$	Unit 7 - Derivatives: Part V
3 Trigonometric Functions: $y = \sin(x)$, $y = \cos(x)$	50 Analysis Using First Derivatives
4 Other Trigonometric Functions	51 Analysis Using Second Derivatives
5 Radical Functions	52 Absolute Extrema
6 Rational Functions	53 Optimization Problems
7 Inverse Functions	54 Related Rates
8 Logarithmic and Exponential Functions	55 Mean Value Theorem for Derivatives
9 Polynomial Inequalities	Unit 8 - Anti-Differentiation: Part I
Unit 2 - Limits and Continuity	56 Anti-Differentiation
10 Introduction to Limits	57 The Chain Rule and Anti-Differentiation
11 Computation of Limits - Part I	58 U-Substitution
12 Indeterminate Forms	59 Anti-Derivatives with Initial Conditions
13 Computation of Limits - Part II	60 Particle Motion
14 Limits to Infinity	61 Exponential Growth and Decay & Newton's Law of Cooling
15 Proving Continuity	62 Separable Differential Equations
16 Intermediate Value Theorem	63 Slope Fields
17 Types of Discontinuity	64 Slope Fields with Initial Value Problems
Unit 3 - Derivatives: Part I	Unit 9 - Anti-Differentiation: Part II
18 Average vs. Instantaneous Velocity	65 Definite Integrals and the Fundamental Theorem of Calculus
19 The Tangent of $y = x^2$	66 Approximate Area Using Numerical Methods
20 The Tangent of $y = 1/x$	67 Riemann Sums - Midpoint
21 The General Rule of the Derivative	68 Net Area
22 Derivatives of Constant and Linear Functions	69 Definite Integrals with Calculator
23 The Power Rule for Derivatives	70 Properties of the Definite Integral
24 Combination Rules: Sum and Difference	71 U-Substitution with Definite Integrals
25 Combination Rule: Product Rule	72 Fundamental Theorem of Calculus - Part II
26 Combination Rule: Quotient Rule	73 Velocity/Position Connection
Unit 4 - Derivatives: Part II	Unit 10 - Anti-Differentiation: Part III
27 Tangent and Normal Lines	74 Numerical Approximations: Trapezoidal Rule
28 Approximating Values of Functions Using Local Linearization	75 Area Under a Curve
29 Local Linearity and Differentiability	76 Area of a Region Between Two Curves
30 Derivatives of Trigonometric Functions - Part I	77 The Average Value
31 Derivatives of Trigonometric Functions - Part II	Unit 11 - Anti-Differentiation: Part IV
32 Product and Quotient Rules with Trigonometric/Algebraic Functions	78 Volumes of Solids of Revolution: The Disc Method
33 Numerical Derivative with a Calculator	79 Volumes of Solids of Revolution: The Washer Method
34 Predicting what $f'(x)$ Looks Like Graphically	80 Volumes of Solids of Revolution: The Shell Method
35 Introduction of the Graph of the Derivative - Calculator-Based	81 Volume of Solids with Known Cross Sections
Unit 5 - Derivatives: Part III	82 Arc Length and Surfaces of Revolution
36 The Chain Rule	83 Integration to Find Surface Area
37 The Chain Rule Activity	84 Work Problems - Part A
38 Velocity of a Particle in Motion	85 Work Problems - Part B
39 Acceleration with Analysis	86 Liquid Pressure and Fluid Force
40 Implicit Differentiation: The Differential Method	Unit 12 - Anti-Differentiation: Part V
41 Implicit Differentiation: The y' Method	87 Review of Integrals
42 The Second Derivative Implicitly	88 Integration by Parts
Unit 6 - Derivatives: Part IV	89 Newton's Method
43 The Derivative of the Exponential Function	90 Indeterminate Forms and L'Hopital's Rule
44 Inverse Functions and Derivatives	91 Inverse Trigonometric Integrals
45 Review of Properties of Logarithms	92 Velocity and Acceleration
46 Derivative of the Logarithmic Functions	93 Preparing for the AP Calculus AB Exam
47 Logarithmic Differentiation	

