



Differentiate in a Day

Section 1 – Defining the Derivative

Section 2 – The Power Rule & Other Key Techniques

Section 3 – The Chain Rule & Advanced Techniques

Section 4 – Applications of Derivatives

Section 1 – Defining the Derivative

Average and Instantaneous Rate of Change

The Limit Definition of a Tangent Line Slope

Defining The Derivative

Section 2 – The Power Rule & Other Key Techniques

Derivative Notation

The Power Rule

The Product Rule

The Quotient Rule

Differentiating Trigonometric Functions

Section 3 – The Chain Rule & Advanced Techniques

The Chain Rule

Second Derivates

Combining Differentiation Rules

Differentiating Exponential Functions

Differentiating Logarithmic Functions

Differentiating Inverse Trigonometric Functions

Implicit Differentiation

Section 4 – Applications of Derivatives

The Equation of a Tangent to a Curve

Determining Whether a Function is Increasing or Decreasing

Determining Local Extrema of a Function

2nd Derivative Test

Points of Inflection

Determining the Nature of Stationary Points

Sketching Curves