



Integrate in a Day

Section 1 – Defining the Integral

Section 2 – The Power Rule & Other Key Techniques

Section 3 – The Reverse Chain Rule & Advanced Techniques

Section 4 – Applications of Integrals

Section 1 - Defining the Integral

Antiderivatives

Antiderivatives and Integration

Section 2 - The Power Rule & Other Key Techniques

Notation for Integration

The Power Rule

Integratable Form

Integrating the Sine and Cosine Functions

Indefinite and Definite Integrals

Evaluating Definite Integrals

Section 3 - The Reverse Chain Rule & Advanced Techniques

Integration by U-Substitution

The Reverse Chain Rule

Integration by Parts

Integration by Parts for Definite Integrals

Integration using Partial Fractions

Improper Integrals

Evaluating Improper Integrals

Section 4 - Applications of Integrals

Finding the Area Under a Curve

Finding the Area Between Two Curves

Volumes of Revolution Around the X-Axis

Volumes of Revolution Around the Y-Axis

Arc Length Using Integration

Evaluating Arc Length Using Integration