

Unit Topic AP Calculus Unit 2 - Integration

Standards

Unit Essential Question

How do we evaluate integrals?

Lesson 1 Focus
Integration by Substitution

Standards

Students Will Know... (Key Vocabulary)

Students Will Be Able To...

1. Use a change of variables to find an indefinite integral
2. Use the General Power Rule for Integration to find an indefinite integral
3. Use a change of variables to evaluate a definite integral
4. Evaluate a def int involving an even or odd function

Lesson Essential Question 1

What is the difference between and indefinite and definite integral?

Lesson 2 Focus
Numerical Integration

Standards

Students Will Know... (Key Vocabulary)

Students Will Be Able To...

1. Approximate a definite integral using the Trapezoidal Rule
2. Approximate a definite integral using Simpson's Rule
3. Analyze the approximate errors in the Trapezoidal Rule and Simpson's Rule

Lesson Essential Question 2

How can we approximate definite integrals?

Lesson 3 Focus

Standards

Students Will Know... (Key Vocabulary)

Students Will Be Able To...

Lesson Essential Question 3

Lesson 4 Focus

Standards

Students Will Know... (Key Vocabulary)

Students Will Be Able To...

Lesson Essential Question 4

Lesson 5 Focus

Standards

Students Will Know... (Key Vocabulary)

Students Will Be Able To...

Lesson Essential Question 5

Major Unit Assignment

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