

Detailed Calculus 2 Daily Study Plan

Complete Daily Breakdown with Content, Quizzes, and Tests

Generated on June 25, 2025

Study Plan Overview

- Total Calculus 2 Study Time: 83.1 hours
- Daily Calculus Study: 3 hours/day (1h morning + 2h afternoon)
- Daily Video Editing: 2 hours/day
- Available Study Days: 57 days
- Study Period: Jun 23, 2025 to Sep 12, 2025
- Total Content: 243 videos, 105 exercises, 18 quizzes, 6 tests

Content Breakdown by Unit

1. Integrals review

- Time: 8h | Topics: 18 | Videos: 55 | Exercises: 26
- Assessments: 4 quizzes, 1 tests

2. Integration techniques

- Time: 11.4h | Topics: 10 | Videos: 34 | Exercises: 11
- Assessments: 2 quizzes, 1 tests

3. Differential equations

- Time: 11.1h | Topics: 11 | Videos: 28 | Exercises: 13
- Assessments: 1 quizzes, 1 tests

4. Applications of integrals

- Time: 18h | Topics: 19 | Videos: 40 | Exercises: 20
- Assessments: 4 quizzes, 1 tests

5. Parametric equations, polar coordinates, and vector-valued functions

- Time: 12.8h | Topics: 15 | Videos: 20 | Exercises: 15
- Assessments: 4 quizzes, 1 tests

6. Series

- Time: 21.8h | Topics: 22 | Videos: 66 | Exercises: 20
- Assessments: 3 quizzes, 1 tests

Daily Schedule Template

10:00 - 11:00 AM: Calculus 2 Study - Focus on current unit topics with Khan Academy videos and practice

11:00 - 11:30 AM: Light Workout/Break - Physical activity to refresh mind and body

11:30 AM - 12:30 PM: Video Editing Work - Part-time job responsibilities

12:30 - 2:00 PM: Lunch & Break - Meal time and personal break

2:00 - 4:00 PM: Deep Calculus 2 Study - Problem solving, practice exercises, and concept reinforcement

4:00 - 5:00 PM: Video Editing Work - Continue part-time job work

Evening: Free Time/Review - Optional review or personal time

Comprehensive Topic Breakdown

Complete listing of all topics and content items with time estimates.

Unit 1: Integrals review

8 hours | 18 topics | 98 content items

1. Accumulations of change introduction

0.3h | 5 items | 3 videos

- Video: Introduction to integral calculus (7min)
- Video: Definite integrals intro (12min)
- Article: Exploring accumulation of change (10min)

... and 2 more content items

2. Approximation with Riemann sums

0.8h | 13 items | 7 videos

- Video: Riemann approximation introduction (10min)
- Video: Over- and under-estimation of Riemann sums (6min)
- Article: Left & right Riemann sums (10min)

... and 10 more content items

3. Summation notation review

0.2h | 4 items | 2 videos

- Video: Summation notation (7min)
- Article: Summation notation (10min)
- Video: Worked examples: Summation notation (8min)

... and 1 more content items

4. Riemann sums in summation notation

0.5h | 6 items | 4 videos

- Video: Riemann sums in summation notation (13min)
- Article: Riemann sums in summation notation (10min)
- Video: Worked example: Riemann sums in summation notation (11min)

... and 3 more content items

5. Defining integrals with Riemann sums

0.3h | 5 items | 3 videos

- Video: Definite integral as the limit of a Riemann sum (7min)
- Article: Definite integral as the limit of a Riemann sum (10min)
- Video: Worked example: Rewriting definite integral as limit of Riemann sum (8min)

... and 2 more content items

6. Integrals review: Quiz 1

0.4h | 1 items | 0 videos

- Topic quiz: Integrals review: Quiz 1 (25min)

7. Fundamental theorem of calculus and accumulation functions

0.3h | 7 items | 4 videos

- Video: The fundamental theorem of calculus and accumulation functions (12min)
- Video: Functions defined by definite integrals (accumulation functions) (6min)
- Exercise: Functions defined by definite integrals (accumulation functions) (18min)
- ... and 4 more content items

8. Interpreting the behavior of accumulation functions

0.1h | 3 items | 1 videos

- Video: Interpreting the behavior of accumulation functions (13min)
- Article: Interpreting the behavior of accumulation functions (10min)
- Exercise: Interpreting the behavior of accumulation functions (18min)

9. Properties of definite integrals

1.1h | 18 items | 14 videos

- Video: Negative definite integrals (8min)
- Video: Finding definite integrals using area formulas (6min)
- Exercise: Finding definite integrals using area formulas (18min)
- ... and 15 more content items

10. Integrals review: Quiz 2

0.4h | 1 items | 0 videos

- Topic quiz: Integrals review: Quiz 2 (25min)

11. Fundamental theorem of calculus and definite integrals

0.1h | 5 items | 2 videos

- Video: The fundamental theorem of calculus and definite integrals (7min)
- Exercise: The fundamental theorem of calculus and definite integrals (18min)
- Video: Antiderivatives and indefinite integrals (6min)
- ... and 2 more content items

12. Reverse power rule

0.4h | 9 items | 4 videos

- Video: Reverse power rule (9min)
- Exercise: Reverse power rule (18min)
- Exercise: Reverse power rule: negative and fractional powers (18min)
- ... and 6 more content items

13. Integrals review: Quiz 3

0.4h | 1 items | 0 videos

- Topic quiz: Integrals review: Quiz 3 (25min)

14. Indefinite integrals of common functions

0.2h | 6 items | 2 videos

- Video: Indefinite integral of $1/x$ (11min)
- Video: Indefinite integrals of $\sin(x)$, $\cos(x)$, and e^x
- Exercise: Indefinite integrals: e^x , $\ln x$, $\sin x$, $\cos x$
- ... and 3 more content items

15. Definite integrals of common functions

0.3h | 10 items | 7 videos

- Video: Definite integrals: reverse power rule (6min)
- Exercise: Definite integrals: reverse power rule (18min)
- Video: Definite integral of rational function (8min)
- ... and 7 more content items

16. Integrals review: Quiz 4

0.4h | 1 items | 0 videos

- Topic quiz: Integrals review: Quiz 4 (25min)

17. Proof videos

1h | 2 items | 2 videos

- Video: Proof of fundamental theorem of calculus (8min)
- Video: Intuition for second part of fundamental theorem of calculus (8min)

18. Integrals review: Unit test

0.8h | 1 items | 0 videos

- Topic unit test: Integrals review: Unit test (45min)

Unit 2: Integration techniques

11.4 hours | 10 topics | 54 content items

1. Integrating with u-substitution

2.8h | 17 items | 11 videos

- Video: Ø5p6-substitution intro (8min)
- Video: Ø5p6-substitution: multiplying by a constant (8min)
- Video: Ø5p6-substitution: defining Ø5p6 (8min)

... and 14 more content items

2. Integrating using long division and completing the square

1h | 4 items | 2 videos

- Video: Integration using long division (8min)
- Exercise: Integration using long division (18min)
- Video: Integration using completing the square and the derivative of $\arctan(x)$ (8min)

... and 1 more content items

3. Integrating using trigonometric identities

1h | 4 items | 3 videos

- Video: Integral of $\cos^3(x)$ (8min)
- Video: Integral of $\sin^2(x) \cos^3(x)$ (8min)
- Video: Integral of $\sin^4(x)$ (8min)

... and 1 more content items

4. Integration techniques: Quiz 1

0.4h | 1 items | 0 videos

- Topic quiz: Integration techniques: Quiz 1 (25min)

5. Trigonometric substitution

1.3h | 9 items | 8 videos

- Video: Introduction to trigonometric substitution (8min)
- Video: Substitution with $x=\sin(\theta)$ (8min)
- Video: More trig sub practice (8min)

... and 6 more content items

6. Integration by parts

1.7h | 10 items | 6 videos

- Video: Integration by parts intro (8min)
- Video: Integration by parts: $\int x^2 \cos(x) dx$ (8min)
- Video: Integration by parts: $\int \ln(x) dx$ (8min)

... and 7 more content items

7. Integrating using linear partial fractions

1h | 2 items | 1 videos

- Video: Integration with partial fractions (8min)
- Exercise: Integration with partial fractions (18min)

8. Improper integrals

1h | 5 items | 3 videos

- Video: Introduction to improper integrals (8min)
- Video: Divergent improper integral (8min)
- Exercise: Improper integrals (18min)
- ... and 2 more content items

9. Integration techniques: Quiz 2

0.4h | 1 items | 0 videos

- Topic quiz: Integration techniques: Quiz 2 (25min)

10. Integration techniques: Unit test

0.8h | 1 items | 0 videos

- Topic unit test: Integration techniques: Unit test (45min)

Unit 3: Differential equations

11.1 hours | 11 topics | 45 content items

1. Differential equations introduction

1h | 3 items | 2 videos

- Video: Differential equations introduction (8min)
- Video: Writing a differential equation (8min)
- Exercise: Write differential equations (18min)

2. Verifying solutions for differential equations

1h | 2 items | 1 videos

- Video: Verifying solutions to differential equations (8min)
- Exercise: Verify solutions to differential equations (18min)

3. Sketching slope fields

1h | 5 items | 4 videos

- Video: Slope fields introduction (8min)
- Video: Worked example: equation from slope field (8min)
- Video: Worked example: slope field from equation (8min)
- ... and 2 more content items

4. Reasoning using slope fields

1h | 3 items | 2 videos

- Video: Approximating solution curves in slope fields (8min)
- Video: Worked example: range of solution curve from slope field (8min)
- Exercise: Reasoning using slope fields (18min)

5. Approximation with Euler's method

1h | 3 items | 2 videos

- Video: Euler's method (8min)
- Video: Worked example: Euler's method (8min)
- Exercise: Euler's method (18min)

6. Differential equations: Quiz 1

0.4h | 1 items | 0 videos

- Topic quiz: Differential equations: Quiz 1 (25min)

7. Separation of variables

1.7h | 9 items | 4 videos

- Video: Separable equations introduction (8min)
- Video: Addressing treating differentials algebraically (8min)
- Article: Separable differential equations (10min)
- ... and 6 more content items

8. Particular solutions to differential equations

1.1h | 6 items | 4 videos

- Video: Particular solutions to differential equations: rational function (8min)
- Video: Particular solutions to differential equations: exponential function (8min)
- Exercise: Particular solutions to differential equations (18min)
- ... and 3 more content items

9. Exponential models

1h | 5 items | 3 videos

- Video: Exponential models & differential equations (Part 1) (8min)
- Video: Exponential models & differential equations (Part 2) (8min)
- Video: Worked example: exponential solution to differential equation (8min)
- ... and 2 more content items

10. Logistic models

1.1h | 7 items | 6 videos

- Video: Growth models: introduction (8min)
- Video: The logistic growth model (8min)
- Video: Worked example: Logistic model word problem (8min)
- ... and 4 more content items

11. Differential equations: Unit test

0.8h | 1 items | 0 videos

- Topic unit test: Differential equations: Unit test (45min)

Unit 4: Applications of integrals

18 hours | 19 topics | 67 content items

1. Average value of a function

1h | 4 items | 3 videos

- Video: Average value over a closed interval (8min)
- Video: Calculating average value of function over interval (8min)
- Exercise: Average value of a function (18min)
- ... and 1 more content items

2. Straight-line motion

1.4h | 8 items | 5 videos

- Video: Motion problems with integrals: displacement vs. distance (8min)
- Video: Analyzing motion problems: position (8min)
- Video: Analyzing motion problems: total distance traveled (8min)
- ... and 5 more content items

3. Non-motion applications of integrals

1.7h | 9 items | 5 videos

- Video: Area under rate function gives the net change (8min)
- Video: Interpreting definite integral as net change (8min)
- Video: Worked examples: interpreting definite integrals in context (8min)
- ... and 6 more content items

4. Applications of integrals: Quiz 1

0.4h | 1 items | 0 videos

- Topic quiz: Applications of integrals: Quiz 1 (25min)

5. Area: vertical area between curves

1.5h | 8 items | 5 videos

- Video: Area between a curve and the x-axis (8min)
- Video: Area between a curve and the x-axis: negative area (8min)
- Exercise: Area between a curve and the x-axis (18min)
- ... and 5 more content items

6. Area: horizontal area between curves

1h | 3 items | 2 videos

- Video: Area between a curve and the \varnothing SP-axis (8min)
- Video: Horizontal area between curves (8min)
- Exercise: Horizontal areas between curves (18min)

7. Area: curves that intersect at more than two points

1h | 1 items | 0 videos

- Exercise: Area between curves that intersect at more than two points (calculator-active) (18min)

8. Applications of integrals: Quiz 2

0.4h | 1 items | 0 videos

- Topic quiz: Applications of integrals: Quiz 2 (25min)

9. Volume: squares and rectangles cross sections

1h | 5 items | 3 videos

- Video: Volume with cross sections: intro (8min)
- Exercise: Volumes with cross sections: squares and rectangles (intro) (18min)
- Video: Volume with cross sections: squares and rectangles (no graph) (8min)
- ... and 2 more content items

10. Volume: triangles and semicircles cross sections

1h | 3 items | 2 videos

- Video: Volume with cross sections: semicircle (8min)
- Video: Volume with cross sections: triangle (8min)
- Exercise: Volumes with cross sections: triangles and semicircles (18min)

11. Volume: disc method (revolving around x- and y-axes)

1h | 4 items | 3 videos

- Video: Disc method around x-axis (8min)
- Video: Generalizing disc method around x-axis (8min)
- Video: Disc method around y-axis (8min)
- ... and 1 more content items

12. Volume: disc method (revolving around other axes)

1h | 4 items | 3 videos

- Video: Disc method rotation around horizontal line (8min)
- Video: Disc method rotating around vertical line (8min)
- Video: Calculating integral disc around vertical line (8min)
- ... and 1 more content items

13. Volume: washer method (revolving around x- and y-axes)

1h | 3 items | 2 videos

- Video: Solid of revolution between two functions (leading up to the washer method) (8min)
- Video: Generalizing the washer method (8min)
- Exercise: Washer method: revolving around x- or y-axis (18min)

14. Volume: washer method (revolving around other axes)

1h | 5 items | 4 videos

- Video: Washer method rotating around horizontal line (not x-axis), part 1 (8min)
- Video: Washer method rotating around horizontal line (not x-axis), part 2 (8min)
- Video: Washer method rotating around vertical line (not y-axis), part 1 (8min)
- ... and 2 more content items

15. Applications of integrals: Quiz 3

0.4h | 1 items | 0 videos

- Topic quiz: Applications of integrals: Quiz 3 (25min)

16. Arc length

1h | 4 items | 3 videos

- Video: Arc length intro (8min)
- Video: Worked example: arc length (8min)
- Exercise: Arc length (18min)
- ... and 1 more content items

17. Calculator-active practice

1h | 1 items | 0 videos

- Exercise: Contextual and analytical applications of integration (calculator-active) (18min)

18. Applications of integrals: Quiz 4

0.4h | 1 items | 0 videos

- Topic quiz: Applications of integrals: Quiz 4 (25min)

19. Applications of integrals: Unit test

0.8h | 1 items | 0 videos

- Topic unit test: Applications of integrals: Unit test (45min)

Unit 5: Parametric equations, polar coordinates, and vector-valued functions

12.8 hours | 15 topics | 40 content items

1. Parametric equations intro

1h | 3 items | 2 videos

- Video: Parametric equations intro (8min)
- Video: Parametric equations differentiation (8min)
- Exercise: Parametric equations differentiation (18min)

2. Second derivatives of parametric equations

1h | 2 items | 1 videos

- Video: Second derivatives (parametric functions) (8min)
- Exercise: Second derivatives (parametric functions) (18min)

3. Arc length: parametric curves

1h | 3 items | 2 videos

- Video: Parametric curve arc length (8min)
- Video: Worked example: Parametric arc length (8min)
- Exercise: Parametric curve arc length (18min)

4. Parametric equations, polar coordinates, and vector-valued functions: Quiz 1

0.4h | 1 items | 0 videos

- Topic quiz: Parametric equations, polar coordinates, and vector-valued functions: Quiz 1 (25min)

5. Vector-valued functions

1h | 5 items | 3 videos

- Video: Vector-valued functions intro (8min)
- Video: Vector-valued functions differentiation (8min)
- Exercise: Vector-valued functions differentiation (18min)
- ... and 2 more content items

6. Parametric equations, polar coordinates, and vector-valued functions: Quiz 2

0.4h | 1 items | 0 videos

- Topic quiz: Parametric equations, polar coordinates, and vector-valued functions: Quiz 2 (25min)

7. Planar motion

1.4h | 7 items | 4 videos

- Video: Planar motion example: acceleration vector (8min)
- Exercise: Planar motion (differential calc) (18min)
- Video: Motion along a curve: finding rate of change (8min)
- ... and 4 more content items

8. Parametric equations, polar coordinates, and vector-valued functions: Quiz 3

0.4h | 1 items | 0 videos

- Topic quiz: Parametric equations, polar coordinates, and vector-valued functions: Quiz 3 (25min)

9. Polar functions

1h | 4 items | 2 videos

- Video: Polar functions derivatives (8min)
- Video: Worked example: differentiating polar functions (8min)
- Exercise: Differentiate polar functions (18min)
- ... and 1 more content items

10. Area: polar regions (single curve)

1h | 4 items | 2 videos

- Video: Area bounded by polar curves (8min)
- Video: Worked example: Area enclosed by cardioid (8min)
- Exercise: Area bounded by polar curves intro (18min)
- ... and 1 more content items

11. Area: polar regions (two curves)

1h | 2 items | 1 videos

- Video: Worked example: Area between two polar graphs (8min)
- Exercise: Area between two polar curves (18min)

12. Arc length: polar curves

1h | 3 items | 2 videos

- Video: Arc length of polar curves (8min)
- Video: Worked example: Arc length of polar curves (8min)
- Exercise: Arc length of polar curves (18min)

13. Calculator-active practice

1h | 2 items | 1 videos

- Video: Evaluating definite integral with calculator (8min)
- Exercise: Area with polar functions (calculator-active) (18min)

14. Parametric equations, polar coordinates, and vector-valued functions: Quiz 4

0.4h | 1 items | 0 videos

- Topic quiz: Parametric equations, polar coordinates, and vector-valued functions: Quiz 4 (25min)

15. Parametric equations, polar coordinates, and vector-valued functions: Unit test

0.8h | 1 items | 0 videos

- Topic unit test: Parametric equations, polar coordinates, and vector-valued functions: Unit test (45min)

Unit 6: Series

21.8 hours | 22 topics | 92 content items

1. Convergent and divergent infinite series

1.7h | 9 items | 6 videos

- Video: Convergent and divergent sequences (8min)
- Video: Worked example: sequence convergence/divergence (8min)
- Exercise: Sequence convergence/divergence (18min)
- ... and 6 more content items

2. Infinite geometric series

1.1h | 7 items | 5 videos

- Video: Worked example: convergent geometric series (8min)
- Video: Worked example: divergent geometric series (8min)
- Exercise: Infinite geometric series (18min)
- ... and 4 more content items

3. Series: Quiz 1

0.4h | 1 items | 0 videos

- Topic quiz: Series: Quiz 1 (25min)

4. nth-term test

1h | 2 items | 1 videos

- Video: nth term divergence test (8min)
- Exercise: nth term test (18min)

5. Integral test

1h | 3 items | 2 videos

- Video: Integral test (8min)
- Video: Worked example: Integral test (8min)
- Exercise: Integral test (18min)

6. Harmonic series and p-series

1h | 4 items | 2 videos

- Video: Harmonic series and $\sum \frac{1}{n^p}$ -series (8min)
- Video: Worked example: p-series (8min)
- Exercise: p-series (18min)
- ... and 1 more content items

7. Comparison tests

1.2h | 7 items | 5 videos

- Video: Direct comparison test (8min)
- Video: Worked example: direct comparison test (8min)
- Exercise: Direct comparison test (18min)
- ... and 4 more content items

8. Alternating series test

1h | 3 items | 2 videos

- Video: Alternating series test (8min)
- Video: Worked example: alternating series (8min)
- Exercise: Alternating series test (18min)

9. Ratio test

1h | 2 items | 1 videos

- Video: Ratio test (8min)
- Exercise: Ratio test (18min)

10. Absolute and conditional convergence

1h | 2 items | 1 videos

- Video: Conditional & absolute convergence (8min)
- Exercise: Determine absolute or conditional convergence (18min)

11. Series: Quiz 2

0.4h | 1 items | 0 videos

- Topic quiz: Series: Quiz 2 (25min)

12. Alternating series error bound

1h | 3 items | 2 videos

- Video: Alternating series remainder (8min)
- Video: Worked example: alternating series remainder (8min)
- Exercise: Alternating series remainder (18min)

13. Taylor and Maclaurin polynomials intro

1.1h | 7 items | 6 videos

- Video: Taylor & Maclaurin polynomials intro (part 1) (8min)
- Video: Taylor & Maclaurin polynomials intro (part 2) (8min)
- Video: Worked example: Maclaurin polynomial (8min)
- ... and 4 more content items

14. Lagrange error bound

1h | 5 items | 4 videos

- Video: Taylor polynomial remainder (part 1) (8min)
- Video: Taylor polynomial remainder (part 2) (8min)
- Video: Worked example: estimating $\sin(0.4)$ using Lagrange error bound (8min)
- ... and 2 more content items

15. Power series intro

1h | 3 items | 2 videos

- Video: Power series intro (8min)
- Video: Worked example: interval of convergence (8min)
- Exercise: Interval of convergence (18min)

16. Function as a geometric series

1h | 6 items | 5 videos

- Video: Function as a geometric series (8min)
- Video: Geometric series as a function (8min)
- Video: Power series of $\arctan(2x)$ (8min)
- ... and 3 more content items

17. Maclaurin series of e^x , $\sin(x)$, and $\cos(x)$

1.3h | 9 items | 8 videos

- Video: Maclaurin series of $\cos(x)$ (8min)
- Video: Maclaurin series of $\sin(x)$ (8min)
- Video: Maclaurin series of e^x
- ... and 6 more content items

18. Representing functions as power series

1.4h | 8 items | 6 videos

- Video: Integrating power series (8min)
- Video: Differentiating power series (8min)
- Exercise: Integrate & differentiate power series (18min)
- ... and 5 more content items

19. Series: Quiz 3

0.4h | 1 items | 0 videos

- Topic quiz: Series: Quiz 3 (25min)

20. Telescoping series

1h | 2 items | 2 videos

- Video: Telescoping series (8min)
- Video: Divergent telescoping series (8min)

21. Proof videos

1h | 6 items | 6 videos

- Video: Formal definition for limit of a sequence (8min)
- Video: Proving a sequence converges using the formal definition (8min)
- Video: Finite geometric series formula (8min)
- ... and 3 more content items

22. Series: Unit test

0.8h | 1 items | 0 videos

- Topic unit test: Series: Unit test (45min)

Weekly Goals Summary

- Week 1:** Complete 18 topics from Integrals review (18h)
- Week 2:** Complete 10 topics from Integration techniques (18h)
- Week 3:** Complete 11 topics from Differential equations (18h)
- Week 4:** Complete 19 topics from Applications of integrals (18h)
- Week 5:** Complete 3 topics from Parametric equations, polar coordinates, and vector-valued functions (3h)
- Week 6:** Complete 0 topics from Parametric equations, polar coordinates, and vector-valued functions (0h)
- Week 7:** Complete 10 topics from Parametric equations, polar coordinates, and vector-valued functions (9h)
- Week 8:** Complete 18 topics from Series (18h)

Detailed Daily Study Plan

Each day shows exactly which videos, exercises, quizzes, and tests to complete.

Week 1

Monday, Jun 23, 2025

- Topic: Accumulations of change introduction
- Goal: Ø=Ý Work on: Accumulations of change introduction + Approximation with Riemann sums
- Unit: Integrals review
- Today's Specific Content:**
- Ø<ß¥ Video: Introduction to integral calculus [7min]
- Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Jun 24, 2025

- Topic: Approximation with Riemann sums
- Goal: Ø=Ý Work on: Approximation with Riemann sums (7 items)
- Unit: Integrals review
- Today's Specific Content:**
- Ø<ß¥ Video: Worked example: finding a Riemann sum using a table [10min]
- Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Jun 25, 2025

- Topic: Approximation with Riemann sums
- Goal: Ø=Ý Work on: Approximation with Riemann sums + Summation notation review
- Unit: Integrals review
- Today's Specific Content:**
- Ø=ÜÖ Article: Understanding the trapezoidal rule [1min]
- Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Jun 26, 2025

Topic: Summation notation review

Goal: $\emptyset = \dot{Y}$ Work on: Summation notation review + Riemann sums in summation notation

Unit: Integrals review

Today's Specific Content:

- $\emptyset = \dot{Y}$ Exercise: Summation notation [4min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Jun 27, 2025

Topic: Defining integrals with Riemann sums

Goal: $\emptyset = \dot{Y}$ Work on: Defining integrals with Riemann sums + Integrals review: Quiz 1

Unit: Integrals review

Today's Specific Content:

- $\emptyset < \beta \neq \dot{Y}$ Video: Definite integral as the limit of a Riemann sum [7min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Jun 28, 2025

Topic: Fundamental theorem of calculus and accumulation functions

Goal: $\emptyset = \dot{Y}$ Work on: Fundamental theorem of calculus and accumulation functions (7 items)

Unit: Integrals review

Today's Specific Content:

- $\emptyset < \beta \neq \dot{Y}$ Video: The fundamental theorem of calculus and accumulation functions [12min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Jun 30, 2025

Topic: Interpreting the behavior of accumulation functions

Goal: $\emptyset = \dot{Y}$ Work on: Interpreting the behavior of accumulation functions + Properties of definite integrals

Unit: Integrals review

Today's Specific Content:

- $\emptyset < \beta \neq \dot{Y}$ Video: Interpreting the behavior of accumulation functions [13min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 2

Tuesday, Jul 1, 2025

Topic: Properties of definite integrals

Goal: $\emptyset = \dot{Y}$ Work on: Properties of definite integrals (9 items)

Unit: Integrals review

Today's Specific Content:

- $\emptyset < \beta \neq \dot{Y}$ Video: Integrating scaled version of function [2min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Jul 2, 2025

Topic: Properties of definite integrals

Goal: $\emptyset = \dot{Y}$ Work on: Properties of definite integrals + 2 more topics

Unit: Integrals review

Today's Specific Content:

- $\emptyset < \beta \neq \dot{Y}$ Video: Functions defined by integrals: switched interval [4min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Jul 3, 2025

Topic: Fundamental theorem of calculus and definite integrals

Goal: Ø=Ý Work on: Fundamental theorem of calculus and definite integrals + Reverse power rule

Unit: Integrals review

Today's Specific Content:

- Ø=ÜÝ Exercise: The fundamental theorem of calculus and definite integrals [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Jul 4, 2025

Topic: Reverse power rule

Goal: Ø=Ý Work on: Reverse power rule + Integrals review: Quiz 3

Unit: Integrals review

Today's Specific Content:

- Ø=ÜÝ Exercise: Reverse power rule: negative and fractional powers [4min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Jul 5, 2025

Topic: Integrals review: Quiz 3

Goal: Ø=Ý Work on: Integrals review: Quiz 3 + Indefinite integrals of common functions

Unit: Integrals review

Today's Specific Content:

- Ø=ÜË Quiz: Integrals review: Quiz 3 [16min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Jul 7, 2025

Topic: Indefinite integrals of common functions

Goal: Ø=Ý Work on: Indefinite integrals of common functions + Definite integrals of common functions

Unit: Integrals review

Today's Specific Content:

- Ø=ÜÝ Exercise: Integrating trig functions [5min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Jul 8, 2025

Topic: Definite integrals of common functions

Goal: Ø=Ý Work on: Definite integrals of common functions + 3 more topics

Unit: Integrals review

Today's Specific Content:

- Ø=ÜÝ Exercise: Definite integrals: common functions [2min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 3

Wednesday, Jul 9, 2025

Topic: Integrals review: Unit test

Goal: Ø=Ý Work on: Integrals review: Unit test + Integrating with u-substitution

Unit: Integrals review

Today's Specific Content:

- Topic unit test: Integrals review: Unit test [38min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Jul 10, 2025

Topic: Integrating with u-substitution

Goal: $\emptyset = \dot{Y}$ Work on: Integrating with u-substitution (8 items)

Unit: Integration techniques

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: $\emptyset 5 \text{p} 6$ -substitution: defining $\emptyset 5 \text{p} 6$ [13min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Jul 11, 2025

Topic: Integrating with u-substitution

Goal: $\emptyset = \dot{Y}$ Work on: Integrating with u-substitution + Integrating using long division and completing the square

Unit: Integration techniques

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: $\emptyset 5 \text{p} 6$ -substitution: definite integrals [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Jul 12, 2025

Topic: Integrating using long division and completing the square

Goal: $\emptyset = \dot{Y}$ Work on: Integrating using long division and completing the square + 3 more topics

Unit: Integration techniques

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Integration using completing the square [6min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Jul 14, 2025

Topic: Trigonometric substitution

Goal: $\emptyset = \dot{Y}$ Work on: Trigonometric substitution + Integration by parts

Unit: Integration techniques

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Substitution with $x = \sin(\theta)$ [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Jul 15, 2025

Topic: Integration by parts

Goal: $\emptyset = \dot{Y}$ Work on: Integration by parts (8 items)

Unit: Integration techniques

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Integration by parts: $\int +x \cos(x) dx$ [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Jul 16, 2025

Topic: Integration by parts

Goal: $\emptyset = \dot{Y}$ Work on: Integration by parts + 2 more topics

Unit: Integration techniques

Today's Specific Content:

- $\emptyset = \ddot{O}$ Article: Integration by parts review [10min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 4

Thursday, Jul 17, 2025

Topic: Improper integrals

Goal: $\emptyset = \dot{Y}$ Work on: Improper integrals + 3 more topics

Unit: Integration techniques

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Improper integral with two infinite bounds [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Jul 18, 2025

Topic: Differential equations introduction

Goal: $\emptyset = \dot{Y}$ Work on: Differential equations introduction + 2 more topics

Unit: Differential equations

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Differential equations introduction [2min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Jul 19, 2025

Topic: Sketching slope fields

Goal: $\emptyset = \dot{Y}$ Work on: Sketching slope fields + 2 more topics

Unit: Differential equations

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Slope fields & equations [18min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Jul 21, 2025

Topic: Differential equations: Quiz 1

Goal: $\emptyset = \dot{Y}$ Work on: Differential equations: Quiz 1 + Separation of variables

Unit: Differential equations

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Quiz: Differential equations: Quiz 1 [25min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Aug 7, 2025

Topic: Separation of variables

Goal: $\emptyset = \dot{Y}$ Work on: Separation of variables + Particular solutions to differential equations

Unit: Differential equations

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Separable differential equations [10min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Aug 8, 2025

Topic: Particular solutions to differential equations

Goal: $\emptyset = \dot{Y}$ Work on: Particular solutions to differential equations + Exponential models

Unit: Differential equations

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Worked example: finding a specific solution to a separable equation [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Aug 9, 2025

Topic: Exponential models

Goal: $\emptyset = \dot{Y}$ Work on: Exponential models + 2 more topics

Unit: Differential equations

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Differential equations: exponential model word problems [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 5

Monday, Aug 11, 2025

Topic: Differential equations: Unit test

Goal: $\emptyset = \dot{Y}$ Work on: Differential equations: Unit test + 2 more topics

Unit: Differential equations

Today's Specific Content:

- Topic unit test: Differential equations: Unit test [33min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Aug 12, 2025

Topic: Straight-line motion

Goal: $\emptyset = \dot{Y}$ Work on: Straight-line motion + Non-motion applications of integrals

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Analyzing motion problems: position [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Aug 13, 2025

Topic: Non-motion applications of integrals

Goal: $\emptyset = \dot{Y}$ Work on: Non-motion applications of integrals (8 items)

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Interpreting definite integral as net change [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Aug 14, 2025

Topic: Non-motion applications of integrals

Goal: $\emptyset = \dot{Y}$ Work on: Non-motion applications of integrals + 2 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Problems involving definite integrals (algebraic) [11min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Aug 15, 2025

Topic: Area: vertical area between curves

Goal: $\emptyset = \dot{Y}$ Work on: Area: vertical area between curves + 2 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Area between two curves given end points [18min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Aug 16, 2025

Topic: Area: curves that intersect at more than two points

Goal: $\emptyset = \dot{Y}$ Work on: Area: curves that intersect at more than two points + 2 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Area between curves that intersect at more than two points (calculator-active) [11min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Aug 18, 2025

Topic: Volume: squares and rectangles cross sections

Goal: $\emptyset = \dot{Y}$ Work on: Volume: squares and rectangles cross sections + 2 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Volumes with cross sections: squares and rectangles [11min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 6

Tuesday, Aug 19, 2025

Topic: Volume: disc method (revolving around x- and y-axes)

Goal: $\emptyset = \dot{Y}$ Work on: Volume: disc method (revolving around x- and y-axes) + 3 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Disc method: revolving around x- or y-axis [1min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Aug 20, 2025

Topic: Volume: washer method (revolving around other axes)

Goal: $\emptyset = \dot{Y}$ Work on: Volume: washer method (revolving around other axes) + 2 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Washer method rotating around horizontal line (not x-axis), part 2 [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Aug 21, 2025

Topic: Arc length

Goal: $\emptyset = \dot{Y}$ Work on: Arc length + 3 more topics

Unit: Applications of integrals

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Arc length [18min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Aug 22, 2025

Topic: Applications of integrals: Unit test

Goal: $\emptyset = \dot{Y}$ Work on: Applications of integrals: Unit test + 2 more topics

Unit: Applications of integrals

Today's Specific Content:

- Topic unit test: Applications of integrals: Unit test [30min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Aug 23, 2025

Topic: Second derivatives of parametric equations

Goal: $\emptyset = \dot{Y}$ Work on: Second derivatives of parametric equations + 3 more topics

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Second derivatives (parametric functions) [5min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Aug 25, 2025

Topic: Vector-valued functions

Goal: $\emptyset = \dot{Y}$ Work on: Vector-valued functions + 2 more topics

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Vector-valued functions differentiation [12min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Aug 26, 2025

Topic: Planar motion

Goal: $\emptyset = \dot{Y}$ Work on: Planar motion + Parametric equations, polar coordinates, and vector-valued functions:

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Planar motion (differential calc) [4min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 7

Wednesday, Aug 27, 2025

Topic: Parametric equations, polar coordinates, and vector-valued functions: Quiz 3

Goal: $\emptyset = \dot{Y}$ Work on: Parametric equations, polar coordinates, and vector-valued functions: Quiz 3 + 2 more topics

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Quiz: Parametric equations, polar coordinates, and vector-valued functions: Quiz 3 [4min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Aug 28, 2025

Topic: Area: polar regions (single curve)

Goal: $\emptyset = \dot{Y}$ Work on: Area: polar regions (single curve) + 2 more topics

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Area bounded by polar curves intro [4min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Aug 29, 2025

Topic: Calculator-active practice

Goal: $\emptyset = \dot{Y}$ Work on: Calculator-active practice + 2 more topics

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Video: Evaluating definite integral with calculator [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Aug 30, 2025

Topic: Parametric equations, polar coordinates, and vector-valued functions: Unit test

Goal: $\emptyset = \dot{Y}$ Work on: Parametric equations, polar coordinates, and vector-valued functions: Unit test + Convergent and divergent infinite series

Unit: Parametric equations, polar coordinates, and vector-valued functions

Today's Specific Content:

- Topic unit test: Parametric equations, polar coordinates, and vector-valued functions: Unit test [12min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Sep 1, 2025

Topic: Convergent and divergent infinite series

Goal: $\emptyset = \dot{Y}$ Work on: Convergent and divergent infinite series + Infinite geometric series

Unit: Series

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Partial sums intro [1min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Sep 2, 2025

Topic: Infinite geometric series

Goal: $\emptyset = \dot{Y}$ Work on: Infinite geometric series + 3 more topics

Unit: Series

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Convergent & divergent geometric series (with manipulation) [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Sep 3, 2025

Topic: Integral test

Goal: $\emptyset = \dot{Y}$ Work on: Integral test + 2 more topics

Unit: Series

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Integral test [7min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 8

Thursday, Sep 4, 2025

Topic: Comparison tests

Goal: $\emptyset = \dot{Y}$ Work on: Comparison tests + 2 more topics

Unit: Series

Today's Specific Content:

- $\emptyset < \beta \neq$ Video: Limit comparison test [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Friday, Sep 5, 2025

Topic: Ratio test

Goal: $\emptyset = \dot{Y}$ Work on: Ratio test + 3 more topics

Unit: Series

Today's Specific Content:

- $\emptyset = \ddot{Y}$ Exercise: Ratio test [18min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Saturday, Sep 6, 2025

Topic: Alternating series error bound

Goal: Ø=Ý Work on: Alternating series error bound + Taylor and Maclaurin polynomials intro

Unit: Series

Today's Specific Content:

- Ø=ÜÝ Exercise: Alternating series remainder [18min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Monday, Sep 8, 2025

Topic: Lagrange error bound

Goal: Ø=Ý Work on: Lagrange error bound + Power series intro

Unit: Series

Today's Specific Content:

- Ø<ß¥ Video: Taylor polynomial remainder (part 1) [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Tuesday, Sep 9, 2025

Topic: Function as a geometric series

Goal: Ø=Ý Work on: Function as a geometric series + Maclaurin series of e^{2x-6} , $\frac{1}{x^2}$

Unit: Series

Today's Specific Content:

- Ø<ß¥ Video: Function as a geometric series [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Wednesday, Sep 10, 2025

Topic: Maclaurin series of e^{2x-6} , $\frac{1}{x^2}$

Goal: Ø=Ý Work on: Maclaurin series of e^{2x-6} , $\frac{1}{x^2}$ & $\ln(x)$

Unit: Series

Today's Specific Content:

- Ø<ß¥ Video: Worked example: cosine function from power series [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Thursday, Sep 11, 2025

Topic: Representing functions as power series

Goal: Ø=Ý Work on: Representing functions as power series + 2 more topics

Unit: Series

Today's Specific Content:

- Ø<ß¥ Video: Finding function from power series by integrating [2min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Week 9

Friday, Sep 12, 2025

Topic: Proof videos

Goal: Ø=Ý Work on: Proof videos + Series: Unit test

Unit: Series

Today's Specific Content:

- Ø<ß¥ Video: Formal definition for limit of a sequence [8min]

Schedule: 10-11 AM (Calculus 1h) | 2-4 PM (Deep Study 2h) | Video Editing: 11:30 AM & 4 PM

Major Milestones

6/26/2025: Complete Integrals review

Progress: 10% (8.0h total)

7/1/2025: Complete Integration techniques

Progress: 23% (19.4h total)

7/5/2025: Complete Differential equations

Progress: 37% (30.5h total)

7/12/2025: Complete Applications of integrals

Progress: 58% (48.5h total)

7/18/2025: Complete Parametric equations, polar coordinates, and vector-valued functions

Progress: 74% (61.3h total)

8/13/2025: Complete Series

Progress: 100% (83.1h total)

Success Strategies

- Morning session (10-11am): Watch Khan Academy videos & take notes
- Afternoon session (2-4pm): Practice problems & work through exercises
- Take detailed notes and create summary sheets for each topic
- Complete all quizzes and tests as scheduled for proper assessment
- Review previous topics for 15 minutes each week
- Use Khan Academy mobile app during breaks for quick reviews
- Focus on understanding concepts, not just memorizing formulas
- Track your progress daily and adjust timeline if needed

Priority Focus Areas

- **Integration techniques and applications (highest priority)**
- **Sequences and series convergence tests**
- **Parametric equations and polar coordinate systems**
- **Differential equations and their applications**
- **Real-world applications of calculus concepts**

Generated by Advanced Calculus 2 Planner - Detailed Daily Edition
Complete with videos, exercises, quizzes, and tests for comprehensive learning!