

AP Calculus AB

Past-Paper Exercise Sheets — Question Index

56 subtopics • 290 questions

1.5 Determining Limits Using Algebraic Properties of Limits

1 question • calculation

Source	Q	Type
2026	6	calculation

1.8 Determining Limits Using the Squeeze Theorem

1 question • calculation

Source	Q	Type
2019	6	calculation

1.11 Defining Continuity at a Point

1 question • calculation

Source	Q	Type
2019	6	calculation

1.15 Connecting Limits at Infinity and Horizontal Asymptotes

2 questions • calculation x2

Source	Q	Type
2025	1	calculation
2022	6	calculation

1.16 Working with the Intermediate Value Theorem (IVT)

5 questions • calculation x4, data response

Source	Q	Type
2026	1	calculation
2025	3	data response
2022	4	calculation
2016	1	calculation
2014	4	calculation

2.1 Defining Average and Instantaneous Rates of Change at a Point

7 questions • calculation x7

Source	Q	Type
2024	1	calculation
2022	4	calculation
2018	4	calculation
2018	5	calculation
2015	2	calculation
2014	1	calculation
2014	4	calculation

2.3 Estimating Derivatives of a Function at a Point

6 questions • calculation x5, data response

Source	Q	Type
2026	1	calculation
2025	3	data response
2021	1	calculation
2019	6	calculation
2016	1	calculation
2015	3	calculation

2.4 Connecting Differentiability and Continuity: Determining When Derivatives Do and Do Not Exist

1 question • calculation

Source	Q	Type
2017	3	calculation

2.5 Applying the Power Rule

2 questions • calculation x2

Source	Q	Type
2025	2	calculation
2018	2	calculation

2.6 Derivative Rules: Constant, Sum, Difference, and Constant Multiple

1 question • calculation

Source	Q	Type
2026	4	calculation

2.7 Derivatives of $\cos x$, $\sin x$, e^x , and $\ln x$

1 question • calculation

Source	Q	Type
2026	4	calculation

2.8 The Product Rule

6 questions • calculation x6

Source	Q	Type
2026	6	calculation
2023	5	calculation
2021	4	calculation
2019	6	calculation
2018	5	calculation
2017	6	calculation

2.9 The Quotient Rule

2 questions • calculation x2

Source	Q	Type
2016	6	calculation
2014	3	calculation

3.1 The Chain Rule

8 questions • calculation x8

Source	Q	Type
2026	6	calculation
2025	5	calculation
2023	1	calculation
2023	5	calculation
2017	6	calculation
2016	6	calculation
2014	3	calculation
2014	5	calculation

3.2 Implicit Differentiation

5 questions • calculation x5

Source	Q	Type
2025	6	calculation
2024	5	calculation
2023	6	calculation
2021	5	calculation
2015	6	calculation

3.5 Selecting Procedures for Calculating Derivatives

1 question • calculation

Source	Q	Type
2015	2	calculation

3.6 Calculating Higher-Order Derivatives

4 questions • calculation x4

Source	Q	Type
2026	6	calculation
2024	4	calculation
2015	4	calculation
2015	6	calculation

4.1 Interpreting the Meaning of the Derivative in Context

6 questions • calculation x6

Source	Q	Type
2023	1	calculation
2021	1	calculation
2021	6	calculation
2018	4	calculation
2017	2	calculation
2014	1	calculation

4.2 Straight-Line Motion: Connecting Position, Velocity, and Acceleration

10 questions • calculation x10

Source	Q	Type
2026	5	calculation
2025	5	calculation
2024	2	calculation
2023	2	calculation
2022	6	calculation
2021	2	calculation
2018	2	calculation
2017	5	calculation
2016	2	calculation
2015	3	calculation

4.4 Introduction to Related Rates

2 questions • calculation x2

Source	Q	Type
2024	5	calculation
2018	4	calculation

4.5 Solving Related Rates Problems

10 questions • calculation x10

Source	Q	Type
2025	6	calculation
2024	5	calculation
2023	6	calculation
2022	2	calculation
2022	4	calculation
2019	4	calculation
2018	4	calculation
2017	1	calculation
2016	5	calculation
2014	4	calculation

4.6 Approximating Values of a Function Using Local Linearity and Linearization

10 questions • calculation x10

Source	Q	Type
2026	3	calculation
2025	6	calculation
2024	5	calculation
2023	3	calculation
2022	5	calculation
2018	6	calculation
2017	4	calculation
2016	4	calculation
2014	1	calculation
2014	6	calculation

4.7 Using L'Hospital's Rule for Determining Limits of Indeterminate Forms

5 questions • calculation x5

Source	Q	Type
2023	4	calculation
2021	4	calculation
2019	3	calculation
2019	6	calculation
2018	5	calculation

5.1 Using the Mean Value Theorem

7 questions • calculation x7

Source	Q	Type
2025	1	calculation
2023	1	calculation
2021	4	calculation
2019	2	calculation
2018	4	calculation
2017	6	calculation
2014	5	calculation

5.2 Extreme Value Theorem, Global Versus Local Extrema, and Critical Points

4 questions • calculation x4

Source	Q	Type
2024	3	calculation
2024	4	calculation
2021	3	calculation
2021	5	calculation

5.3 Determining Intervals on Which a Function Is Increasing or Decreasing

9 questions • calculation x9

Source	Q	Type
2026	4	calculation
2023	5	calculation
2022	1	calculation
2022	2	calculation
2022	3	calculation
2018	3	calculation
2017	2	calculation
2017	3	calculation
2015	5	calculation

5.4 Using the First Derivative Test to Determine Relative (Local) Extrema

10 questions • calculation x10

Source	Q	Type
2024	3	calculation
2024	4	calculation
2023	4	calculation
2021	3	calculation
2021	5	calculation
2018	1	calculation
2016	3	calculation
2015	4	calculation
2015	5	calculation
2014	5	calculation

5.5 Using the Candidates Test to Determine Absolute (Global) Extrema

12 questions • calculation x12

Source	Q	Type
2026	4	calculation
2025	1	calculation
2025	4	calculation
2023	4	calculation
2022	1	calculation
2022	3	calculation
2019	1	calculation
2019	3	calculation
2018	5	calculation
2017	3	calculation
2016	3	calculation
2015	1	calculation

5.6 Determining Concavity of Functions over Their Domains

12 questions • calculation x12

Source	Q	Type
2026	3	calculation
2026	4	calculation
2024	1	calculation
2023	3	calculation
2023	4	calculation
2023	5	calculation
2022	3	calculation
2022	5	calculation
2021	4	calculation
2021	6	calculation
2019	1	calculation
2019	4	calculation

5.7 Using the Second Derivative Test to Determine Extrema

1 question • calculation

Source	Q	Type
2015	4	calculation

5.9 Connecting a Function, Its First Derivative, and Its Second Derivative

2 questions • calculation x2

Source	Q	Type
2025	4	calculation
2018	3	calculation

5.12 Exploring Behaviors of Implicit Relations

4 questions • calculation x4

Source	Q	Type
2025	6	calculation
2024	5	calculation
2023	6	calculation
2015	6	calculation

6.1 Exploring Accumulations of Change

1 question • calculation

Source	Q	Type
2019	1	calculation

6.2 Approximating Areas with Riemann Sums

12 questions • calculation x11, data response

Source	Q	Type
2026	1	calculation
2025	3	data response
2024	1	calculation
2023	1	calculation
2022	4	calculation
2021	1	calculation
2019	2	calculation
2018	4	calculation
2017	1	calculation
2016	1	calculation
2015	3	calculation
2014	4	calculation

6.3 Riemann Sums, Summation Notation, and Definite Integral Notation

1 question • calculation

Source	Q	Type
2022	1	calculation

6.4 The Fundamental Theorem of Calculus and Accumulation Functions

9 questions • calculation x9

Source	Q	Type
2026	6	calculation
2025	1	calculation
2025	4	calculation
2024	4	calculation
2022	1	calculation
2022	3	calculation
2021	4	calculation
2019	3	calculation
2015	1	calculation

6.5 Interpreting the Behavior of Accumulation Functions Involving Area

9 questions • calculation x9

Source	Q	Type
2026	1	calculation
2025	4	calculation
2023	1	calculation
2023	4	calculation
2021	4	calculation
2018	1	calculation
2017	2	calculation
2016	3	calculation
2014	3	calculation

6.6 Applying Properties of Definite Integrals

2 questions • calculation x2

Source	Q	Type
2019	3	calculation
2018	3	calculation

6.7 The Fundamental Theorem of Calculus and Definite Integrals

12 questions • calculation x11, data response

Source	Q	Type
2026	6	calculation
2025	3	data response
2025	4	calculation
2024	1	calculation
2024	4	calculation
2023	5	calculation
2021	3	calculation
2019	3	calculation
2018	3	calculation
2017	3	calculation
2016	6	calculation
2015	5	calculation

6.9 Integrating Using Substitution

2 questions • calculation x2

Source	Q	Type
2016	6	calculation
2014	5	calculation

7.1 Modeling Situations with Differential Equations

3 questions • calculation x3

Source	Q	Type
2026	3	calculation
2023	3	calculation
2021	6	calculation

7.2 Verifying Solutions for Differential Equations

1 question • calculation

Source	Q	Type
2015	4	calculation

7.3 Sketching Slope Fields

8 questions • calculation x8

Source	Q	Type
2024	3	calculation
2023	3	calculation
2022	5	calculation
2021	6	calculation
2018	6	calculation
2016	4	calculation
2015	4	calculation
2014	6	calculation

7.4 Reasoning Using Slope Fields

4 questions • calculation x4

Source	Q	Type
2026	3	calculation
2023	3	calculation
2022	5	calculation
2015	4	calculation

7.6 Finding General Solutions Using Separation of Variables

5 questions • calculation x5

Source	Q	Type
2024	3	calculation
2023	3	calculation
2022	5	calculation
2017	4	calculation
2014	6	calculation

7.7 Finding Particular Solutions Using Initial Conditions and Separation of Variables

10 questions • calculation x10

Source	Q	Type
2026	3	calculation
2024	3	calculation
2023	3	calculation
2022	5	calculation
2021	6	calculation
2019	4	calculation
2018	6	calculation
2017	4	calculation
2016	4	calculation
2014	6	calculation

7.8 Exponential Models with Differential Equations

1 question • calculation

Source	Q	Type
2021	6	calculation

8.1 Finding the Average Value of a Function on an Interval

10 questions • calculation x10

Source	Q	Type
2025	1	calculation
2024	1	calculation
2023	1	calculation
2022	1	calculation
2021	1	calculation
2019	1	calculation
2018	4	calculation
2016	5	calculation
2015	3	calculation
2014	1	calculation

8.2 Connecting Position, Velocity, and Acceleration of Functions Using Integrals

12 questions • calculation x12

Source	Q	Type
2026	5	calculation
2025	5	calculation
2024	2	calculation
2023	2	calculation
2022	3	calculation
2022	6	calculation
2021	2	calculation
2019	2	calculation
2018	2	calculation
2017	5	calculation
2016	2	calculation
2015	3	calculation

8.3 Using Accumulation Functions and Definite Integrals in Applied Contexts

9 questions • calculation x8, data response

Source	Q	Type
2026	1	calculation
2025	3	data response
2022	1	calculation
2021	1	calculation
2018	1	calculation
2017	1	calculation
2017	2	calculation
2016	1	calculation
2015	1	calculation

8.4 Finding the Area Between Curves Expressed as Functions of x

7 questions • calculation x7

Source	Q	Type
2026	2	calculation
2025	2	calculation
2024	6	calculation
2022	2	calculation
2019	5	calculation
2015	2	calculation
2014	2	calculation

8.7 Volumes with Cross Sections: Squares and Rectangles

6 questions • calculation x6

Source	Q	Type
2026	2	calculation
2025	2	calculation
2024	6	calculation
2022	2	calculation
2019	5	calculation
2015	2	calculation

8.8 Volumes with Cross Sections: Triangles and Semicircles

1 question • calculation

Source	Q	Type
2014	2	calculation

8.9 Volume with Disc Method: Revolving Around the x- or y-Axis

3 questions • calculation x3

Source	Q	Type
2026	2	calculation
2021	3	calculation
2016	5	calculation

8.10 Volume with Disc Method: Revolving Around Other Axes

1 question • calculation

Source	Q	Type
2014	2	calculation

8.12 Volume with Washer Method: Revolving Around Other Axes

3 questions • calculation x3

Source	Q	Type
2025	2	calculation
2024	6	calculation
2019	5	calculation