Exam Overview

The AP Calculus AB and BC Exams assess student understanding of the mathematical practices and learning objectives outlined in the course framework. The exams are both 3 hours and 15 minute long and include 45 multiple-choice questions and 6 free-response questions. The details of the exams, including exam weighting, timing, and calculator requirements, can be found below:

Section	Question Type	Number of Questions	Exam Weighting	Timing
I	**Multiple-choice questions**			
	Part A: Graphing calculator not permitted	30	33.3%	60 minutes
	Part B: Graphing calculator required	15	16.7%	45 minutes
II	**Free-response questions**			
	Part A: Graphing calculator required	2	16.7%	30 minutes
	Part B: Graphing calculator not permitted	4	33.3%	60 minutes

The exams assess content from the three big ideas of the course.
Big Idea 1: Change
Big Idea 2: Limits
Big Idea 3: Analysis of Functions

The AP Exams also assess each of the units of the course—eight units for AP Calculus AB and 10 for AP Calculus BC—with the following exam weighting on the multiple-choice section:

Exam Weighting for the Multiple-Choice Section of the AP Exam

Unit	Exam Weighting AB	Exam Weighting BC
Unit 1: Limits and Continuity	**10–12%**	**4–7%**
Unit 2: Differentiation: Definition and Basic Derivative Rules	**10–12%**	**4–7%**
Unit 3: Differentiation: Composite, Implicit, and Inverse Functions	**9–13%**	**4–7%**
Unit 4: Contextual Applications of Differentiation	**10–15%**	**6–9%**
Unit 5: Applying Derivatives to Analyze Functions	**15–18%**	**8–11%**
Unit 6: Integration and Accumulation of Change	**17–20%**	**17–20%**
Unit 7: Differential Equations	**6–12%**	**6–9%**
Unit 8: Applications of Integration	**10–15%**	**6–9%**
Unit 9: Parametric Equations, Polar Coordinates, and Vector-Valued Functions BC ONLY		**11–12%**
Unit 10: Infinite Sequences and Series BC ONLY		**17–18%**

Task Verbs Used in Free-Response Questions

The following task verbs are commonly used in the free-response questions:

- **Approximate:** Use rounded decimal values or other estimates in calculations, which require writing an expression to show work.
- **Calculate/Write an expression:** Write an appropriate expression or equation to answer a question. Unless otherwise directed, calculations also require evaluating an expression or solving an equation, but the expression or equation must also be presented to show work. "Calculate" tasks might also be formulated as "How many?" or "What is the value?"
- **Determine:** Apply an appropriate definition, theorem, or test to identify values, intervals, or solutions whose existence or uniqueness can be established. "Determine" tasks may also be phrased as "Find."
- **Estimate:** Use models or representations to find approximate values for functions.
- **Evaluate:** Apply mathematical processes, including the use of appropriate rounding procedures, to find the value of an expression at a given point or over a given interval.
- **Explain:** Use appropriate definitions or theorems to provide reasons or rationales for solutions and conclusions. "Explain" tasks may also be phrased as "Give a reason for..."
- **Identify/Indicate:** Indicate or provide information about a specified topic, without elaboration or explanation.
- **Interpret:** Describe the connection between a mathematical expression or solution and its meaning within the realistic context of a problem, often including consideration of units.
- **Interpret (when given a representation):** Identify mathematical information represented graphically, numerically, analytically, and/or verbally, with and without technology.
- **Justify:** Identify a logical sequence of mathematical definitions, theorems, or tests to support an argument or conclusion, explain why these apply, and then apply them.
- **Represent:** Use appropriate graphs, symbols, words, and/or tables of numerical values to describe mathematical concepts, characteristics, and/or relationships.
- **Verify:** Confirm that the conditions of a mathematical definition, theorem, or test are met in order to explain why it applies in a given situation. Alternately, confirm that solutions are accurate and appropriate.