Exam Overview

The AP Statistics Exam assesses student understanding of the skills and learning objectives outlined in the course framework. The exam is 3 hours long and includes 40 multiple-choice questions and 6 free-response questions. The details of the exam, including exam weighting and timing, can be found below:

Section	Question Type	Number of Questions	Exam Weighting	Timing
I	**Multiple-choice questions**	**40**	**50%**	**90 minutes**
II	**Free-response questions**	**6**		
	Part A: Questions 1–5		**37.5%**	**65 minutes**
	Part B: Question 6: Investigative task		**12.5%**	**25 minutes**

Formulas and tables are furnished to students taking the AP Statistics Exam (see p. 253). Each student is expected to bring a graphing calculator with statistical capabilities to the exam. Students may not use minicomputers, pocket organizers, electronic writing pads, or calculators with QWERTY (i.e., typewriter) keyboards on the AP Statistics Exam. See the **Calculator Policy for AP Statistics** on **apstudent.collegeboard.org** for a complete list of eligible calculators and policies concerning enhancements to eligible calculators.

The exams assess content from the three big ideas of the course.
Big Idea 1: Variation and Distribution
Big Idea 2: Patterns and Uncertainty
Big Idea 3: Data-Based Predictions, Decisions, and Conclusions

The multiple-choice section of the AP Exam assesses the nine units of the course with the following exam weighting:

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

Units	Exam Weighting
Unit 1: Exploring One-Variable Data	**15–23%**
Unit 2: Exploring Two-Variable Data	**5–7%**
Unit 3: Collecting Data	**12–15%**
Unit 4: Probability, Random Variables, and Probability Distributions	**10–20%**
Unit 5: Sampling Distributions	**7–12%**
Unit 6: Inference for Categorical Data: Proportions	**12–15%**
Unit 7: Inference for Quantitative Data: Means	**10–18%**
Unit 8: Inference for Categorical Data: Chi-Square	**2–5%**
Unit 9: Inference for Quantitative Data: Slopes	**2–5%**

How Student Learning Is Assessed on the AP Exam

The four AP Statistics skill categories are assessed on the AP Exam as detailed below.

Skill Category	Multiple-Choice Section	Free-Response Section
Skill 1: Selecting Statistical Methods	Multiple-choice questions assess students' ability to select methods for collecting and/or analyzing data for statistical inference. Students will need to identify key and relevant information to answer a question or solve a problem (including appropriate inference methods), describe appropriate methods for gathering and representing data, and identify null and alternative hypotheses.	One free-response question will primarily focus on collecting data, assessing Skills 1.B and/or 1.C. Other free-response questions may also assess this skill category.
Skill 2: Data Analysis	Multiple-choice questions will assess students' ability to describe patterns, trends, associations, and relationships in data. Students will need to describe data presented numerically or graphically, perform statistical calculations, and compare distributions.	One free-response question will primarily focus on exploring data, assessing some combination of Skills 2.A, 2.B, 2.C, and/or 2.D. Other free-response questions may also assess this skill category.
Skill 3: Using Probability and Simulation	Multiple-choice questions will assess students' ability to explore random phenomena. Students will need to determine relative frequencies, proportions, or probabilities using simulation or calculations. Additionally, students will need to describe and determine parameters for probability distributions. Students will also need to construct confidence intervals and calculate test statistics.	One free-response question will primarily focus on probability and sampling distributions, assessing some combination of Skills 3.A, 3.B, and/or 3.C. Other free-response questions may also assess this skill category.
Skill 4: Statistical Argumentation	Multiple-choice questions will assess students' ability to develop an explanation or justify a conclusion using evidence from data, definitions, or statistical inference. Students will need to make appropriate claims, interpret statistical calculations, verify application of inference procedures, and justify statistical claims.	At least three of the first five free-response questions, as well as the investigative task, will assess statistical argumentation.

Section I: Multiple-Choice

All four AP Statistics skill categories are assessed in the multiple-choice section with the following weighting:

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

Skill Categories	Exam Weighting
Skill 1: Selecting Statistical Methods	**15–23%**
Skill 2: Data Analysis	**15–23%**
Skill 3: Using Probability and Simulation	**30–40%**
Skill 4: Statistical Argumentation	**25–35%**

Section II: Free-Response

The second section of the AP Statistics Exam includes six free-response questions, including one investigative task.

The five free-response questions in Part A include the following:

- One multi-part question with a primary focus on Collecting Data, assessing Skill Category 1: Selecting Statistical Methods.
- One multi-part question with a primary focus on Exploring Data, assessing Skill Category 2: Data Analysis.
- One multi-part question with a primary focus on Probability and Sampling Distributions, assessing Skill Category 3: Using Probability and Simulation.

- One question with a primary focus on Inference, assessing the inference skills associated with Skill Categories 1, 3, and 4.
- One question that focuses on two or more skill categories.

The investigative task (Part B) assesses multiple skill categories and content areas, focusing on the application of skills and content in new contexts or in non-routine ways.