# AP Calculus AB

#### About the Exam

#### **Exam Overview**

The AP Calculus AB Exam will test your understanding of the mathematical concepts covered in the course units, as well as your ability to determine the proper formulas and procedures to use to solve problems and communicate your work with the correct notations. A graphing calculator is permitted for parts of the exam. Note: You may not take both AP Calculus AB and Calculus BC Exams within the same year.

#### **Exam Duration**

3hrs 15mins -- This does not include proctor instruction, which adds about an extra hour to the day.

Monday, May 13, 2024 @ 7:45 AM (Door opens at 7:30 AM) Location: Auditorium

Students will be excused from all classes on test day.

Students that arrive late will not be allowed to take the exam and will have to pay the restock fee.

# What to Bring on AP Exam Day

#### What to Bring:

- An acceptable calculator if your AP Exam allows the use of a calculator.
- A watch that does not have internet access, does not beep or make noise, and does not have an alarm.
- Chromebook with charger for AP Spanish Language and Culture Exam.
- Although the following will be provided for you. You are welcome to bring your own.
  - No. 2 pencils (No mechanical pencils)
  - Pens with black or dark blue ink

#### What NOT to Bring:

- Electronic equipment including phones, smartwatches, fitness trackers, wearable technology, cameras, recording or listening devices, or any other type of electronic or communication device.
  - Chromebooks are allowed only for the AP Spanish Language and Culture Exam.
- Books, reference guides, notes, compasses, protractors, mechanical pencils, pencils that are not No. 2, correction fluid, dictionaries, highlighters, or colored pencils.
- Scratch paper: Students are prohibited from bringing scratch paper to the AP Exam. For AP Chinese and AP Japanese Exams, scratch paper will be provided.
- Watches that beep, make a noise, or have an alarm.
- Computers or calculators that are not approved.
- Reference guides, keyboard maps, or other typing instructions.
- Far plugs
- Clothing or shoes with subject-related information.
- Food or drink.
  - You are not permitted to eat while testing. Students will not be released during the 1<sup>st</sup> lunch and might be late for 2<sup>nd</sup> lunch. You are able to eat in the designated area during the 10-minute break between Sections 1 and 2 of the exam. You can have a water bottle with you while testing, just do not drink over the booklets.
- Clipboards.

A student observed with any of these prohibited items during testing or breaks may be dismissed from the exam, the device may be confiscated, the student's score may be canceled, and no retest may be permitted.

Follow any specific health and safety protocols for the exam room that your school may have in place. AP policies allow you to bring hand sanitizer to the room, but it must be placed under the desk, not on the desk. You may use any other PPE (such as masks) following your school's current requirements.

## **Exam Components**

#### **Section I: Multiple Choice**

45 questions | 1hr 45min | 50% of Exam Score

- Part A: Graphing calculator not permitted (33.3% of score)
- Part B: Graphing calculator required for some questions (16.7% of score)
- Questions include algebraic, exponential, logarithmic, trigonometric, and general types of functions.
- Questions include analytical, graphical, tabular, and verbal types of representations.

#### Section II: Free Response

6 questions | 1hr 45min | 50% of Exam Score

- Part A: 2 problems | Graphing calculator required (16.7% of score)
- Part B: 4 problems | Graphing calculator not permitted (33.3% of score)
- Questions include various types of functions and function representations and a roughly equal mix of procedural and conceptual tasks.
- Questions include at least 2 questions that incorporate a real-world context or scenario into the question.

#### The above information can be found at the following website:

https://apstudents.collegeboard.org/courses/ap-calculus-ab/assessment

## **Exam Fees**

Exam fees can be paid to the bookkeeping office starting Monday, May 20.

Exam Fee: \$97 per exam

- \$40 unused/canceled exam fee will be charged to any student that decides not to take the AP exam and/or drops an AP class after
- Some students may qualify for a CollegeBoard fee reduction or waiver.
  - Please see the Testing Secretary for more details. Students that qualify for the fee reduction and have all paperwork submitted, will have exam fees waived.

If you are not sure how much you need to pay or if you qualify for the fee reduction, please come by the Testing Window for clarification.

The ASB office accepts the following:

- Cash
- Card
  - NOT Accepted: Discover & American Express (AMEX)
- Check made payable to: Eastmont High School EHS
  - \*Please confirm the fee amount before writing a check.
- No online or over-the-phone payments
- Payment plan options are available -- Please see Ms. Lepez at the Bookkeeping Office.

There are many resources on the College Board website, take some time to review before test day.

Feel free to contact the EHS Bookkeeping Office or myself, if you have any questions or concerns regarding exam fees.

Teresa Venegas **Testing Secretary** Eastmont High School 509-888-4753

venegast@eastmont206.org

# **AP Exam Calculator Policy**

This page is now updated with information about 2023 exams.

#### Important to know:

- Only certain types and brands of calculators are allowed. Scroll down this page to see the list of approved graphing calculators and the list of unapproved calculators. The proctor will check all calculators before the exam starts.
- You can bring up to 2 permitted calculators to the exam. Be sure to bring calculators that you're familiar with and that are in good working order.
- You don't need to clear your calculators' memories before or after the exam.

#### Exam day rules:

- You can't share calculators with other exam takers.
- You can't use your calculator to communicate with other calculators.
- You can't use calculator memories to take test materials out of the room. If you try to take test materials out of the room by any method, your scores will be canceled.
- If you don't want to use a calculator, you may take an exam without one. However, if you choose to take an exam without a calculator, you must hand copy, date, and sign a Calculator Release
- Statement on exam day, which will be provided by your AP coordinator or proctor.

## Courses and Calculator Use

Course	Type of calculator allowed	Section I Multiple Choice	Section II Free Response
Biology	<ul> <li>Four-function calculator (with square root)</li> <li>Scientific (non graphing) calculator, but must not have unapproved features or capabilities</li> <li>Graphing calculator</li> </ul>	Allowed	Allowed
Calculus AB	Graphing calculator	Required for Part B	Required for Part A
Calculus BC	Graphing calculator	Required for Part B	Required for Part A
Chemistry	A scientific calculator (must not have unapproved features or capabilities; see list of unapproved calculators and technology) or graphing calculator are recommended; a four-function calculator is allowed but not recommended.	Allowed (starting with 2023 exam)	Allowed

Calculators are not allowed for any other AP Exams, including Computer Science A and Computer Science Principles, unless a student has an approved accommodation for use of a four-function calculator.

## 2022-23 List of Approved Graphing Calculators

This list will be updated as necessary to include new approved calculators.

### Casio

FX-6000 Series	FX-6200 Series	FX-6300 Series
FX-6500 Series	FX-7000 Series	FX-7300 Series
FX-7400 Series	FX-7500 Series	FX-7700 Series
FX-7800 Series	FX-8000 Series	FX-8500 Series
FX-8700 Series	FX-8800 Series	Graph25 Series
FX-9700 Series*	FX-9750 Series*	FX-9860 Series*
CFX-9800 Series*	CFX-9850 Series*	CFX-9950 Series*
CFX-9970 Series*	FX 1.0 Series*	FX-CG-10 *
Algebra FX 2.0 Series*	FX-CG-20 Series*	FX-CG-50*
Graph35 Series*	Graph75 Series*	Graph95 Series*
Graph100 Series*	FX-CG500* (The use of the stylus is not permitted)	

## **Hewlett-Packard**

HP-9G	HP-28 Series*	HP-38G*
HP-39 Series*	HP-40 Series*	HP-48 Series*
HP-49 Series*	HP-50 Series*	HP Prime*

### **Radio Shack**

EC-4033	EC-4034	EC-4037

## Sharp

EL-5200	EL-9200 Series*	EL-9300 Series*
EL-9600 Series* (The use of the stylus is not permitted)	EL-9900 Series*	

## **Texas Instruments**

TI-73	TI-80	TI-81
TI-82*	TI-83*	TI-83 Plus*
TI-83 Plus Silver*	TI-84 Plus*	TI-84 Plus CE*
TI-84 Plus CE Python*	TI-84 Plus Silver*	TI-84 Plus C Silver*
TI-84 Plus T*	TI-84 Plus CE-T*	TI-84 Plus CE-T Python Edition*
TI-85*	TI-86*	TI-89*
TI-89 Titanium*	TI-Nspire*	TI-Nspire CX*
TI-Nspire CAS*	TI-Nspire CX CAS*	TI-Nspire CM-C*
TI-Nspire CM-C CAS*	TI-Nspire CX-C CAS*	TI-Nspire CX II*
TI-Nspire CX II-T*	TI-Nspire CX II CAS*	TI-Nspire CX II-T CAS*
TI-Nspire CX II-C CAS*		

## Other

Datexx DS-883	Micronta	NumWorks*
Smart2		

Calculators are not allowed for any other AP Exams, including Computer Science A and Computer Science Principles, unless a student has an approved accommodation for use of a four-function calculator.

\*Graphing calculators with the expected built-in capabilities for AP Calculus are indicated with an asterisk. See the AP Calculus AB and BC Course and Exam Description for details. However, students may bring any calculator on the list to the exam; any model within each series is acceptable. Only approved graphing calculators from the list are permitted for AP Calculus Exams. This list will be updated as necessary to include new approved calculators. Check this list regularly before exam day to make sure you have the most up-to-date information.

This list only includes approved graphing calculators. There is not an approved list of scientific (non graphing) calculators.

## **Unapproved Calculators and Technology**

Students are not allowed to use any of the following:

- Phones, smartwatches, or wearable technology of any kind
- Portable/handheld computers, tablets, laptops, electronic writing pads
- Models with QWERTY (i.e., typewriter-like) keypads as part of hardware or software (e.g., TI-92 Plus, Voyage 200)
- Models with pen-input/stylus capability (e.g., Palm, PDAs, Casio ClassPad)
- Models with wireless, Bluetooth, or cellular capability
- Models that require an electrical outlet, "talk"\*\* or make noise, or have a paper tape
- Models that can access the internet
- Models that have cell phone capability or audio/video recording or playing capability
- Models that have a camera, scanning capability, or any other smartphone-type features
- Models with touch-screen capability that aren't on the list of approved graphing calculators (e.g., Casio ClassPad)
- Hardware peripherals such as a stylus, keyboard, or wireless adapter with an approved calculator

<sup>\*\*</sup>Unless approved by the College Board SSD Office as an accommodation.