AP CALCULUS – Updated 5/6

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Questions answered:

Can students submit a PDF of their handwritten work?

Yes, so long as they combine all photos of their handwritten response into a single PDF for that question.

Important: once photos of their handwritten work are saved as a PDF, they are no longer considered photos by the system, but documents: PDFs are document files, not image files. So when the timer reaches 5 minutes remaining, the student must click the "Attach Response" button within the exam and then select "Attach Text File" to locate their saved PDF, rather than the "Attach Photos" button.

Can students use two devices during the exam?

Yes. Students can use two devices, as long as the e-ticket is only used on ONE device.

We don't recommend multiple device options in the AP Testing Guide, because it's more complicated and time-consuming, but if your students are confident in their ability to use multiple devices, it's not prohibited to do so.

Here's how:

- 1. The student clicks the e-ticket on their laptop/desktop, which will open up the exam on that machine, where the student will view the exam question(s) and the timer.
- 2. The student can then handwrite their response and photograph it with a smartphone or tablet.
- 3. When no fewer than 5 minutes remain, the student should email or transfer the photo(s) to their laptop/desktop and save the photos to a folder they can find easily.

Note: if the student has a cloud-based file storage system they can access on both devices (e.g., Google Drive or iCloud), the student can access the photos from their laptop/desktop, but then must save the photo to their

laptop/desktop as a .jpg, .jpeg, or .png file. The HEIC photo file format common to Apple devices can't be submitted as is; see the relevant FAQ about HEIC files below

- 4. The student then clicks "Attach Response," and then selects "Attach Photos"
- 5. After the student ensures that all photos for that question have been attached, the student must click "Submit" before the time expires. In each case, as always, students should wait for the upload to complete and the "Your AP Exam is Complete" confirmation message to appear before they close the exam browser window.

Can student submit an HEIC file of a photo of their handwritten work?

Recent iPhones and iPads save photos as HEIC files. HEIC photo files can't be submitted "as is" in the online exam. They must be converted to an accepted file format. Here are two ways students can do that:

 Update their Apple device settings before the exam so that their photos will be saved as .jpeg files: Settings > Camera > Formats > Select "Most Compatible"

OR

 Resave the HEIC file as an accepted file format: the easiest way to convert an HEIC file is for students to email it to themselves using the iPhone or iPad Mail app. The attached image will automatically be converted to a JPEG.

Can a student use Apple Pencil to write their response on a tablet?

Yes, the Apple Pencil can be used with apps like Word or Notes to compose a response. Before exam day, the student should decide which file type they will submit – an image file or a text file – and practice creating a response in a particular app and saving the file in one of the accepted file formats:

- If saving as an image: the student should save each page as a .jpg, .jpeg, or .png file and use the "Attach Photos" option. They should remember to attach all images before clicking "Submit."
- If saving as a text file: the student should save the all pages of the response as a .doc, .docx, .pdf, .txt, .odt file and use the "Attach Text File" option.

Can a student use an equation editor to develop their response?

It depends:

- Yes, if the student saves their response as a PDF and then attaches it
 using the "Attach Text File" option. The student should check the PDF
 carefully before submitting it.
- No, if the student plans to copy and paste their response into the field in online exam. The copy/paste option does not recognize images, and since equation editors create images, students cannot copy/paste responses that contain mathematical, scientific, or other symbols and notations. Instead, the student should save and attach as a PDF any responses that utilize an equation editor, or if a student wants to copy/paste, the student MUST use the typing guides available at cb.org/apexamdaydocs instead of using an equation editor.