

PRINT NAME

PERM NUMBER

In Math 34A this quarter we'll be using the "Fixed Length" format for gradescope. This means that gradescope will expect the pages you submit to match the assignment pdf's pages. There are two ways to do this:

- Use a tablet, download the pdf, write directly on it, then upload your completed assignment to gradescope. If you have a tablet and stylus (i.e. iPad and Apple Pencil), this is the best way.
- Write your work and answers on paper, make sure the pages match, scan with your phone and upload. This is acceptable, but can go wrong in two ways: the first is that Gradescope will reject your submission if it has the wrong number of pages. If you're still paying attention, write 5 as the answer to question 1. The second way this can go wrong is that the TA will mark the problem wrong if it is on the wrong page (it can be fixed with a regrade request, but still you don't want to have to do that).

1. $2 + 2 =$

Sometimes a problem may have a lot of text to state the question, and there's nothing for you to write on that page. If this happens, you cannot skip that page in your submission! Tablet users won't have to do anything; the page is already in the pdf, so as long as you don't delete it your submission will be correct. By the way, the answer to the Ultimate Question of Life, the Universe, and Everything (as well as the next problem) is 42. When writing by hand, simply scan a blank page so that your page numbers match.

2. Today we're making hot sauce. A Google search revealed a recipe that calls for:

- 18 jalapeños.
- 1 cup of water.
- 2 cups of vinegar.

as well as some aromatics. Spiciness of a pepper is measured in Scoville units, and jalapeños have 5000 Scoville units each. We only have 4 jalapeños on hand, but we have plenty of the following peppers:

- Anaheim peppers (1000 Scoville units).
- Serrano peppers (15,000 Scoville units).
- Cayenne peppers (50,000 Scoville units).
- Thai peppers (70,000 Scoville units).
- Habanero peppers (150,000 Scoville units).
- Ghost peppers (1,000,000 Scoville units)
- Carolina reapers (2,000,000 Scoville units)

- i) What is the hottest pepper we could include without our hot sauce becoming spicier than the original recipe?
- ii) You decide to use all four of your jalapeños, and use serrano peppers to complete the recipe. How many serranos should you use if you want to make a hot sauce that is exactly as spicy as the original recipe?
- iii) You're really curious about the flavor of the Carolina reaper, but you want to dilute the spiciness with water/vinegar. How many cups of water do you need to add to a Carolina reaper to make hot sauce that is as spicy as the original recipe?

2. Scratch work:

Answers:

- (i)
- (ii)
- (iii)

3. For those of you who are writing by hand, you have a few options for how to scan your papers.

- iPhone users: The built-in Notes app has the ability to scan pdfs, and it does quite a good job. See here for instructions on how to do this: <https://support.apple.com/en-us/HT210336> To upload to gradescope, you can tap Share 📎 and email it to yourself, then upload from a computer.
- Android users: gradescope recommends an app call Genius Scan to scan and upload your assignment. They have instructions here: <https://help.gradescope.com/article/0chl25eed3-student-scan-mobile-device>
- Tablet users: Make sure you know how to export a PDF from your favorite note-taking app. Sometimes students take a screenshot of their iPad and submit that, but it's a really clunky way to do things. Here are some resources:
 - [Exporting documents or pages in GoodNotes 5](#)
 - [Exporting Notes in Notability](#)

In either case, the process mostly amounts to “look for the Share 📎 button”.

3. Answers:

(i) Are you planning to use paper or tablet this quarter?

(ii) Which app are you planning to use to make the PDF?

That's it! This is going to be a great quarter. Now test what you've learned by uploading this quiz to gradescope.