

Possible Problems for Quiz 6 to be taken 3/7/19. Of these problems I will choose 3 to be on the quiz.

Problem 1

Find the Eigen values and Eigen vectors of the matrix $A = \begin{bmatrix} 2 & 1 \\ 0 & -1 \end{bmatrix}$

Problem 2

Prove the following theorem.

The set of eigen vectors associated with an eigen value λ together with the zero vector forms a subspace.

Problem 3

Suppose the deformation of a solid composite material under and applied loading can be calculated with the linear transformation $A = \begin{bmatrix} 1 & -1 & 0 \\ 0 & 2 & -1 \\ 1 & 1 & 1 \end{bmatrix}$. If the initial volume of the solid is $2m^3$ what is the volume after?

In this case there are only 3 problems because I was late in posting them! In addition I have decided to run the quizzes a bit differently for the rest of the semester. I would like to make it more of a Q&A type thing. That is, I would like for you to interact with each other, myself and our ULA's.

So, from now on this is how Quizzes will go. I will still post problems a week before, and I will still pick 3. You will still need to come to class to pick up the quiz but the last 15 min of class will instead be dedicated to give you time to ask questions/ work in groups etc on the quiz. You can choose to turn in the quiz before you leave, however you will have until Friday at 11:59pm to scan it in to grade scope yourself. If you turn it in before class ends I will scan it in for you. Should you choose to take it to keep working on, keep in mind the file you upload must be a pdf. I recommend some kind of scanning app for your phone that converts images to pdfs. I have had luck with camscanner, but there are lots of free ones out there.

So in summary.....

1. Quiz problems will still be posted a week in advance.
2. You still need to come to class to pick up the official scannable document.
3. During our quiz time you will be encouraged to ask us questions or work in groups, you may ask nonquiz questions as well.
4. You may still turn in your quiz before you leave and I will scan it in.
5. You may take your quiz home, but you must upload it to Gradescope before 11:59 pm on the following Friday.

