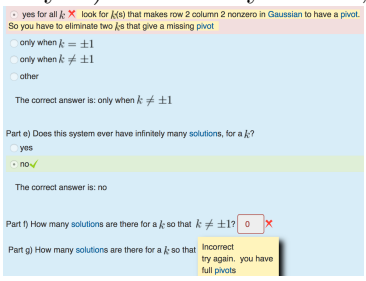
Engagement with 2240 Course Material—Optimize your Success and Understanding!

I care about your success and have designed 2240 to help you learn, incorporating feedback from prior students and principles from the literature like *Make It Stick: The Science of Successful Learning* by Peter Brown, which I highly recommend.

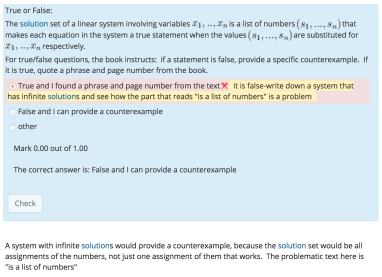
Try it Out! low stakes *i-clickers* & hw

Review and Understand: feedback and solutions. Try the problems on your own from scratch (without the solutions in front of you) after a day or two, and again before an exam.

Apply: Problem Sets, Exams, Final Project



Check Instantaneous Feedback, Repeatable



General Feedback

The purpose of homework is to learn and practice computational strategies, concepts, and develop critical thinking and problem-solving skills, so you should first try problems on your own. Making mistakes is integral to the learning process—the key is to try to engage rather than give up. It is on purpose that there are problems in the homework that don't look exactly like what we did in class in order to provide you with rich settings to explore in order to learn deeply and stretch you beyond what we do in class.

Online Homework (Part 1) **Instantaneous Feedback** opens after you "check" a response in a given problem, and then you can retake it as needed. **General Feedback** opens after you submit all problems on an assignment and finish (you can retake an assignment before it is due–that is repeatable too!). For credit I ask for a good faith effort—you'll see a check when you have achieved that. The point of these is to help you develop your understanding. **Glossary Entries** are also available for you to click on at any point in the process to help—you should work to internalize the concepts as you learn the language of linear algebra.

The purpose of **Paper Homework** (Part 2) is to build your independence as your further engage with the concepts. Show work. For true/false attempt to defend your reasoning: if it is true, quote a page number and otherwise produce a counterexample. If you are stuck, ask a question you would ask another student to progress or find something similar like the "closest example I can find is example 1 on page..." If you are stuck, try to engage beyond "where do I begin?" by finding some connection to course resources, restating definitions, or showing an example that you tried.

Solutions (to online and paper hw, and problem sets) open on the due date. Skim through them—I strive to help you understand the bigger-picture and/or diverse methods and perspectives, so some problem solutions may have more than what the problem asked for, or may have two different solutions.

Try the problems on your own from scratch (without the solutions in front of you) after a day or two, and again before an exam. I provide the problem numbers that I adapt online homework from.