

Hi all,

Just starting this discussion for the final exam. If you come across a topic and you are confused if it will be on the exam or what type of question I can ask from it, post it here, and I will try to answer as soon as I can. Also, feel free to ask other questions.

Topics to skip:

- Echelon form of matrices
- Cramer's rule
- Integration
- Second-order conditions in terms of derivatives for maximization with more than one variable

No need to memorize (if asked, will state the definition):

- Commutative/associative laws for sets
- Definitions for idempotent/symmetric/skew-symmetric/orthogonal matrices
- Properties Inverse/transpose/determinants

Other things to note:

- Be able to find the determinant and inverse of 2×2 matrices without a formula (for anything greater will provide a formula)
- Need to know all the rules of differentiation and be able to differentiate different types of functions (products, quotients, log functions, exponential functions)
- I won't ask you to verify if a function is concave or convex using the linear combination definition like 11.5 Q1 or 2 on the last problem set (just the second derivative)
- For the envelope theorem, you don't need to know the proof, just the result. For example, I can ask you how the value of your objective function changes with respect to a parameter (e.g., in Q4 on the sample final, I could have asked how the utility changes if the interest rate increases.)

Pro tip: While writing the exam, make sure to show your work to get full credit. This also helps you get partial credit in case you make a small error.