Purpose: Your portfolio should demonstrate your mathematical writing and reasoning through clear communication of solutions.

Details: Submit complete solutions to seven problems selected from a subset of the notes (indicated with a $\frac{(3)}{3}$ ) or any graded homework problem. If there is a problem that you would like to write up and submit as part of your portfolio but it doesn't fit these criteria, let me know and we will work something out. A complete solution includes the problem statement and full sentences (both English and mathematical) structuring every piece of computation. Your solutions should communicate how the computations given lead to answering the question being asked. You may work with other people and use outside resources, but you must write up your final solution in your own words, on your own and include a list of people you work with and any sources you use besides your class notes or textbook.

Due Date: Your portfolio is due Friday, November 17, 2017. I highly recommend writing these solutions as we cover material. You may type or handwrite your solutions. If you are interested in typing them, we should talk to determine the best way for you to type mathematical content.

Grading: This assignment will be graded on completeness and on the strength of your mathematical communication. The rubric I will use to grade is included below. The grade will appear as "Quiz 8" in D2L. A sample portfolio is available on my website.

| Category | 3 points | 2 points | 1 point | 0 points |
| :---: | :--- | :--- | :--- | :--- |
| Citation | Every time a test <br> or a theorem is <br> used, it is named <br> and the <br> hypotheses are <br> thoroughly <br> checked. | Once or twice a <br> theorem/test is <br> not named or not <br> all of the <br> hypotheses are <br> checked. | Theorems/tests <br> used are <br> consistently <br> unnamed or the <br> hypotheses are not <br> consistently <br> checked. | Crucial theorems <br> and tests are not <br> used. |
| Computation | All computations <br> are clear and <br> correct. | Some minor errors <br> or lack of clarity. | Some reasonable <br> attempt is made <br> at the necessary <br> computations. | Few or no <br> attempts at <br> necessary <br> computations. |
| Argument | The solution is <br> presented in <br> complete sentences <br> with a logical <br> progression and <br> with full detail. | Mostly complete <br> sentences but lack <br> of detail, <br> organization, or <br> logical progression | Some explanation <br> and organization | Difficult to follow; <br> very little <br> explanation <br> provided. |
| Notation | (1 point) |  | Clear and <br> appropriate <br> notation. | Confusing and/or <br> inconsistent <br> notation. |

