

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

Details: Submit complete solutions to **three** problems selected from a subset of the notes (indicated with a $\frac{m}{n}$) or any *graded* homework problem from the new material (**parametric equations and later**). 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 **Wednesday, December 13, 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 11" in D2L. A sample portfolio is available on my website.

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