

Grading Rubric for Problem Sets

2-Point Question:

Response	Points
Correct	2
Incorrect	1
Not Attempted	0

3-Point Question:

Response	Points
Correct	3
Incorrect due to minor error	2
Incorrect due to major error	1
Solution not attempted	0

6-Point Question:

Description of Response	Points
Correct and clearly laid out/explained	6
Correct but not clearly laid out, or a very minor error	5.5
General approach and tools are correct, but some (easily fixable) errors make the answer incorrect	5
General approach is correct, but major errors make the answer incorrect and difficult to fix.	4
Solution attempted, but shows a major misunderstanding as to the correct approach	3
Solution not attempted	0

11-Point Question (Proof):

Validity	6 points	5 points	3 points	2 points
	Method of proof is appropriate, deductions follow the rules of logic, any calculations are correct.	Method of proof is appropriate, deductions and/or calculations may contain small, easily fixable mistakes.	Method of proof is appropriate, but the logical steps or calculations of the proof have gaps that would be difficult to fix.	Proof attempted, but method of proof is inappropriate, or there are egregious gaps in the logic of the proof.
Readability	3 points	2 points	1 point	
	Writing is clear and easy to read. All mathematical notation is appropriately explained.	Writing is generally clear and easy to read, but there may be several small easily fixable issues with clarity or notation.	Writing is be difficult to read, due to lack of explanation of mathematical notation, or more general lack of clarity.	
Conciseness	2 points	1 points	0 point	
	The proof does not contain unnecessary steps or unnecessary mathematical notation. Mathematical notation is used when it is clearer and more concise than English.	Some unnecessary steps or notation present. Sometimes tries to use English to explain something that would be simpler using math notation.	Proof is much more complex and wordy than it could be.	

9-Point Question (Pseudocode):

Correctness	6 points	5 points	4 points	3 points
	Code uses an appropriate approach. All steps are in the proper order, are executable, and lead to a correct output.	Some small errors in lead to an incorrect output on some inputs. These errors could be easily fixed.	Several steps are missing or out of order, often leading to incorrect output.	The code contains mistakes that would be hard to fix, or uses an approach that is inappropriate.
Readability	3 points	2 points	1 point	0 point
	Pseudocode is very clear, understandable, readable, and organized into as few steps as possible (without losing clarity). Input and output is defined, variable names are chosen appropriately, and comments inserted as necessary. There is enough detail that someone other than the author could create code from the pseudocode.	Most of the criterion for full credit are met, but there are some small, easily fixable oversights.	Code is understandable, but it is not well organized.	Code is not understandable.