

Homework 1 Grading Rubric

MCS 401 Summer 2015

Here is how I graded the first assignment. There were actually 121 points possible - 46 based on completeness, 70 based on correctness, and 5 based on me being able to navigate what you turned in - but making over 100 points was not allowed.

1 Check Marks (46 points possible)

Check marks mean that you attempted a part of a problem, not that you did it correctly. Sorry for any confusion this causes.

I considered attempting each separate part of a given problem as one point. Problem 1 had 3 points possible, Problem 2 had 10, Problem 3 had 6, Problem 4 had 2, Problem 5 had 6, Problem 6 had 1, Problem 7 had 2, Problem 8 had 2, Problem 9 had 1, Problem 10 had 1, Problem 11 had 2, Problem 12 had 1, Problem 13 had 5, Problem 14 had 2, and Problem 15 had 2.

The breakdown of each problem into parts should be clear when you look at the problem in all cases except for the first one. There, I considered the two cases where you needed to write a script as separate parts and everything else as one part.

2 Graded Problems (70 points possible)

I graded 7 of the problems based on correctness and made each worth 10 points.

Problem 4(a)

- (0 points) missing
- (3 points) correct base case only
- (5 points) base case and partial induction step
- (8 points) some mistakes, but getting there

- (10 points) completely correct

Problem 5

- (0 points) missing or only answers with no supporting work when at least two of the answers are wrong
- (3 points) just answers with no work and one answer is wrong
- (5 points) just answers with no work but all are correct
- (8 points) answers are explained with some mistakes
- (10 points) all answers correct and correct supporting work given

Problem 6

- (0 points) missing
- (3 points) gave it a try but did not get very close
- (5 points) confused the definition of Big-Oh but was otherwise ok
- (8 points) almost got it, but couldn't get the right condition on c
- (10 points) correct answer

Problem 8(b)

- (0 points) missing
- (5 points) tried to use SBP but didn't know how
- (10 points) used SBP to solve the problem

Problem 11

- (0 points) both a and b are incorrect
- (5 points) only one is correct
- (10 points) both a and b are correct

Problem 13(a)

- (0 points) missing

- (5 points) did repeated substitutions but did not notice the pattern or made some kind of error
- (10 points) noticed the pattern

Problem 15

- (0 points) neither direction is correct
- (5 points) only one direction is correct
- (10 points) both directions are correct

3 Presentation Bonus (+5 points possible)

I gave an extra 5 points to some people as a thank you for turning in something that was easy to grade. These assignments had somewhat ok handwriting or were typed, the problem numbers were not hidden underneath the staple, and, most importantly, the problems were in sequence. So thanks to those of you who did that!