

Homework 1

Math 282 Computational Geometry
Spring 2019

Solve the following problems from the textbook, and submit your solutions either on Moodle or in the homework mailbox (RMS level 3, near the fireplace) by 4:00pm on **Friday, February 15**.

If you are taking this course for elective credit towards the computer science major, then do the problem labeled **CS only** and not the problems labeled **math only**. Otherwise, do the problems labeled **math only** instead of the problem labeled **CS only**.

1. Exercise 1.5
2. Exercise 1.10 — **math only**
3. Exercise 1.13 — **math only**
4. Exercise 1.15 modified — **CS only** – Code up the equation in this exercise (in your favorite programming language) and verify that it works on several polygons with integer coordinates. To check the area of your polygons, you could use the area given by by [Pick's Theorem](#). You don't need to prove that the equation in Exercise 1.15 is correct.
5. Exercise 1.17
6. Exercise 1.21
7. Exercise 1.22