

**Due:** upload to Gradescope by Friday 4 October 2019 at 3pm.

Hand in written solutions to the following exercises from the textbook. Grading: 1 point per exercise for completeness. The exercises marked with a  $(\star)$  will also be graded for correctness, and will be assigned an additional 3 points each.

**Chapter 1.1:**

Ex. 11  
Ex. 12  
Ex. 13  
Ex. 14  
Ex. 15  
Ex. 16 $(\star)$   
Ex. 17 $(\star)$   
Ex. 19

**Chapter 1.2:**

Ex. 20  
Ex. 26 $(\star)$   
Ex. 30 $(\star)$

Hand in a written answer to the following question from the lecture.

**Q1:** Given a system of two linear equations in three variables, what possibilities are there for the solution set (i.e., does it consist of a unique solution, no solution, or infinitely many solutions)? Motivate your answer using geometric arguments. What happens if instead you have a system of three linear equations in three variables?