## Homework 3

## Math 469 (section 500), Spring 2016

This homework is due on Thursday, February 4.

- 1. Consider a colony of bacteria such that, at each time point, half the population divides, and exactly 200 bacteria die. Write down a difference equation that describes this.
- 2. In several sentences, describe the main message of Tuesday's lecture (January 26).
- 3. In several sentences, describe the main message of Thursday's lecture (January 28).
- 4. Propose a homework problem arising from the topics covered in lecture this week. Solve it.
- 5. Pick a published mathematical biology paper (for instance, from the list on the class **Piazza** site). State the title and authors, and state (in several sentences) the main scientific and/or mathematical question(s) that the paper addresses.