## 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.
