

## Homework on §1

**Due: Thursday, January 31**

1. In the Python tutorial, do exercises 4–9.
2. A grasshopper sits at the 0 of a number line. It can jump either 5 units in either direction, or 3 units in either direction, or any combination thereof (like two jumps of length 5 left, then a jump of length 3 right). What is the set of numbers that the grasshopper can reach with a sequence of jumps?
3. Silverman 1.2. Give a geometric proof, and also a proof by induction.
4. Silverman 1.3.