

Homework on §2

Due: Thursday, February 7

1. A circular dial has the numbers 0 through 56 inscribed at equal intervals along the rim.
 - (a) A grasshopper sits at the 0. It can jump 5 units in either direction (clockwise or counterclockwise) any number of times. What is the set of numbers that the grasshopper can reach with a sequence of jumps?
 - (b) Same question, but instead the grasshopper can only jump 3 units at a time.
2. Silverman 2.1.
3. Silverman 2.5.
4. Silverman 3.2.
5. Silverman 5.1.
6. Silverman 5.6. The proof should be very short!