18.104. Problem Set 1

Due date: Session #3. Late homeworks will be accepted only with a medical note or for some other MIT approved reason. You may work with others, but the final write-up should be entirely your own and based on your own understanding.

Square roots:

1. Text, problem 7, page 10. (Extra question: can you find a closed formula which gives the entries on the nth rung of the ladder?)

- **2.** Text, problem 10, page 19.
- 3. Text, problem 8, page 96.

4. Can you construct a generalization of the ladder in problem 1, which produces in the limit \sqrt{m} for $m \ge 3$ (instead of $\sqrt{2}$)?