### 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 $n$th 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 $m \geq 3$ (instead of $\sqrt{2}$ )?
