Review #2

Chapters 5 and 6, and corresponding lecture notes.

Chap. 5: Induction and Recursion
- math induction
- strong induction
- recursion

Chap. 6: Counting
- product rule
- sum rule
- inclusion-exclusion principle
- pigeonhole principle
- generalized pigeonhole principle
- permutations
- combinations
- binomial coefficients
- permutation with repetitions
- combination with repetitions
- permutation with indistinguishable objects
- distributing objects into boxes
distinguishable objects and distinguishable boxes
indistinguishable objects and distinguishable boxes