

Homework 2

- Due 11:59PM on February 6.
- Please be aware of appendix [H.5](#) (in the syllabus) regarding homework policies.
- Many problems can be solved by “identifying the right subproblems” or “changing the input”, which may be counterintuitive.
- Before submitting, we encourage you to ask yourself, *Is this really the simplest way to solve the problem? Is this really the clearest way to explain the solution?*
- There are also multiple choice questions on Gradescope.
- Exercises [5.1](#) and [5.2](#) do not require proofs of correctness (as stated explicitly in their instructions), but the other exercises do (which is generally the default). For these exercises, your proofs should probably include the word “induction”.

1. Exercise [5.1](#) problems [2](#), [4–6](#) and [9](#).
2. Exercise [5.2](#) problems [1–3](#).
3. Exercise [5.10](#).
4. (Optional challenge / for fun) Exercise [5.9](#).