



CEMC Math Circles - Grade 11/12

March 24, 2020 - March 30, 2020

Greedy Algorithms - Solutions

As past BCC problems, a solution to each exercise is available on our [Past Contests](#) webpage. Links to booklets containing these solutions are included in the table below. We also indicate which of the problems can be solved by a natural greedy approach and which probably cannot be.

| | | |
|-------------------------------------|--------------------------|------------|
| Nesting Dolls | solution | greedy |
| Water Bottles | solution | greedy |
| Coins and Monsters | solution | not greedy |
| Super Hero | solution | greedy |
| Mountain Climber | solution | greedy |
| Translation Machine | solution | not greedy |

Notice that the two problems for which a greedy approach fails can both be solved using another algorithmic paradigm called *dynamic programming*.