

CSC/MAT-220: HOMEWORK 4

DUE: 10/19/2018

Book Problems

Please do each of the following problems from the class book [1]:

22.14, 22.15, 23.2 (a, f, i), 23.11, 24.18, 24.19, 25.8, 25.17, 26.9, 27.21

Other Problems

- I. Recall the island of knights and knaves. This problem is related to the principle of mathematical induction and is taken from [2]: I once came across an inhabitant who said, “This is not the first time I have said what I am now saying.” Was this inhabitant a knight or a knave?

References

- [1] E. R. Scheinerman, *Mathematics: A discrete introduction*, 3rd ed., Brooks/Cole, Boston, MA, 2013.
- [2] R. M. Smullyan, *The Gödelian puzzle book*, Dover, Mineola, NY, 2013.