

Assignment #4

Due Wednesday, 25 September 2019, at the start of class

The problems below are all from Chapters 4 and 5, that is, on topology. However, they address exactly the kinds of topological concerns which are relevant in real analysis.

One exercise below is identified with your initials. Please \LaTeX this problem and send both the `.tex` and `.pdf` to me at `elbueler@alaska.edu` by the same due date as above. See the course website for a \LaTeX template.

DO THE FOLLOWING EXERCISES from the textbook:¹

CHAPTER 4

- Exercise #4 on page 55. ← **DD**
- Exercise #46 on page 59.
- Exercise #48 on page 59. ← **WV**
- Exercise #50 on page 59.

CHAPTER 5

- Exercise #6 on page 65. ← **AM**
- Exercise #17 on page 66.
- Exercise #20 on page 66.
- Exercise #24 on page 66.

¹Carothers, *Real Analysis*, Cambridge University Press 2000.