

Math 206, Fall 2024 — Homework 9

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Due November 22 at 5:00 pm

Instructions. This problem set contains problems from Week 11 of class. The problem numbers refer to our textbook, *Reading, Writing, and Proving* by Ulrich Daep and Pamela Gorkin.

Problem 1. Do the following textbook problems: 18.4, 18.5, 18.7 (hint: notice that every term in the sum $\frac{1}{2^{n+1}} + \frac{1}{2^{n+2}} + \cdots + \frac{1}{2^{n+1}}$ is bounded below by $\frac{1}{2^{n+1}}$), 18.14 (the notation $\prod_{j=1}^n a_j$ means the product $a_1 \cdots a_n$), 19.10, 19.12, 19.13, 19.14.