Homework 4
Due Date: February 18

All problems are to be answered in completed sentences. Note that “No” and “Yes” are not complete sentences.

Book Problems:

• Chapter 2.6, pages 118-120: 22, 29, 34
• Chapter 2.7, pages 131-135: 18, 23, 24, 36
• Chapter 3.1, pages 141-144: 3
• Chapter 3.2, pages 156-161: 9

Other Problems:

**Problem 1.** Show that the set \{\ldots, -4, -3, -2, -1\} has the same cardinality as the set \(\mathbb{N} = \{1, 2, 3, 4, \ldots\}\).

**Problem 2.** Find the value of \(x = \frac{2}{10} + \frac{2}{100} + \frac{2}{1000} + \frac{2}{10000} + \cdots\).