Math 220 - Discrete Mathematics - Fall 2016 Homework 2b Due Monday, September 19

1. Book Problems

Section 1.8 # 1, 4, 6, 9, 11, 13, 14

2. Additional Problems

(2) Let
$$A_n = \left[-\frac{1}{n}, \frac{1}{n} \right]$$
. What are $\bigcup_{n \in \mathbb{N}} A_n$ and $\bigcap_{n \in \mathbb{N}} A_n$?

(3) Let
$$B_n = \left(-\frac{1}{n}, \frac{1}{n}\right)$$
. Compute $\bigcup_{n \in \mathbb{N}} B_n$ and $\bigcap_{n \in \mathbb{N}} B_n$. Do your answers change from Problem (2)? Did you expect them to?