

Part I: Read and Respond

No Part I this time, but you will likely need to refresh your reading of Section 3.3 as you work on the Part II exercises.

Part II: Exercises (prepare for class for Friday, March 21)

1. For each of the following sets, find the complement and the closure of the set.

(a) (e, π)

(b) \mathbb{N}

(c) \mathbb{Q}

(d) $\left\{ \sum_{j=1}^n \frac{1}{j^2} : n \in \mathbb{N} \right\}$

(e) $\{-1, 1\}$

(f) $(0, 1]$

(g) \mathbb{R}^+

(h) \emptyset

2. Exercise 3.3.1

3. Exercise 3.3.5

Part III: Problems (due Wednesday, March 26 at the beginning of class)

1. Exercise 3.2.11 (I)
2. Exercise 3.2.15 (P)