Quiz Set 3 For Quiz on Friday, October 10

Work all of the following exercises. A subset of these exercises and definitions from Sections 3.3 and 3.4 will be on Quiz 3 to be given October 10. Quizzes will be graded for correctness and clarity. All exercises are from the textbook *Proofs and Fundamentals* (Second Edition) by Ethan D. Bloch.

- Exercise 3.3.9
- Exercise 3.3.22
- Exercise 3.4.1 (1) and (4)
- Exercise 3.4.4: Note: Part (2) has a typo in the text. It should read "Prove that $\bigcap_{Y \in \mathcal{B}} Y \subseteq \bigcap_{X \in \mathcal{A}} X$."
- Exercise 3.4.5
- Exercise 3.4.7