

**MATH250: FOUNDATIONS OF MATHEMATICS
SPRING 2020**

Homework 4: due Wednesday, Feb. 19

- Section 2.1: 6, 7, 10, 12.

Additional problems:

- (1) Let A, B, C, D be arbitrary sets. Prove or disprove:
 - (a) If $A \subset B, B \subset C, C \subset D$, then $A \subset D$.
 - (b) If $A \not\subset B$ and $B \not\subset C$, then $A \not\subset C$.
 - (c) If $A \subset B$ and $B \not\subset C$, then $A \not\subset C$.