Fall 2026, Math 296: Week 7 Preliminary Problems
Due: Thursday, October 8th, 2026
Sets

Preliminary problems. These problems should be completed before discussion on Thursday.

(P1) Consider the following sets.

$$A = \{1, 2, 5, 7, 9\} \qquad B = \{2, 3, 4, 5, 6\} \qquad C = \{1, 3, 7, 9\}$$

Compute each of the following, and find their cardinality.

(a) $A \cup B$

(b) $A \cap B$

(c) $A \cap B \cap C$

(d) $(A \setminus B) \cup (B \setminus A)$

(e) $(A \cup B \cup C) \setminus (A \cup B)$