

In class exercises: Sets

1. Prove that for any sets A and B ,

$$A \cap B \subseteq A.$$

2. For any sets A , B , and C ,

$$A \cap (B \cup C) = (A \cap B) \cup (A \cap C).$$

3. For any sets A , B , and C ,

$$A - (B \cup C) = (A - B) \cap (A - C).$$