Computer Science 1323
Homework

Use an element chasing argument to prove each of the following set identities.

1. $(A \cup B)' = A' \cap B'$

2. $[A \cap (B \cup C)]' = A' \cup (B' \cap C')$

3. $A - (A - B) = A \cap B$

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

5. $\mathbf{P}(A) \cup \mathbf{P}(B) \subseteq \mathbf{P}(A \cup B)$