



### Why

We study how intersection and union interact.

### Results

The following are easy results.<sup>1</sup> They are known as the *distributive laws*.

**Proposition 1.**  $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$

**Proposition 2.**  $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$

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<sup>1</sup>The accounts will appear in future editions.



