Try it!

Let $A = \{1,2,3,4,5\}$

$B = \{1,2,5\}$

Is $A \subseteq A$?

Is $B \subseteq A$?

Is $A \subseteq B$?

Is $\{1\} \in A$?

Is $1 \in A$?

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A proof!

What's the analogue of DeMorgan's Laws…

$\bar{A} \cap \bar{B} = \overline{A \cup B}$ $A = B \equiv \forall x(x \in A \leftrightarrow x \in B) \equiv A \subseteq B \wedge B \subseteq A$

$\bar{A} \cap \bar{B} \subseteq \overline{A \cup B}$

$\overline{A \cup B} \subseteq \bar{A} \cap \bar{B}$

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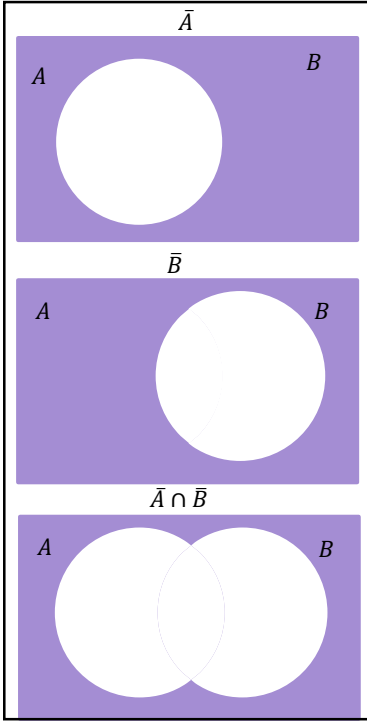

Try to find the diagram for $\overline{A \cup B}$

Is it the same?

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Extra Set Practice

Suppose $A \subseteq B$. Show that $\mathcal{P}(A) \subseteq \mathcal{P}(B)$.

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