

Proposition: Subset is Absorbed

Let $A \subseteq B$ be two sets, then

$$A \cup B = B$$

Proof

- \subseteq
 - Let $x \in A \cup B$, if $x \in B$ the proof is done, if $x \in A$ then by assumption $x \in B$ as needed.
- \supseteq
 - Let $x \in B$ then $x \in B \cup A$

