

Theorem

If $A \subseteq B$ then $\mathcal{P}(A) \subseteq \mathcal{P}(B)$.

Proof.

- Choose $C \in \mathcal{P}(A)$,
- which only happens if $C \subseteq A$.
- But $A \subseteq B$ so $C \subseteq B$,
- and thus $C \in \mathcal{P}(B)$.

