

Proposition 13.A: Suppose A is uncountable and $A \subseteq B$. Then B is uncountable.

Proposition 13.B: $\{a + \sqrt{2}b : a, b \in \mathbb{Q}\}$ is countable.

Proposition 13.28: Every open interval (a, b) has the same cardinality as \mathbb{R} .