Theorem (2.4.38)**.** *Let A, and B be sets with equal cardinality.* $|P(A)| = |P(B)|$.

Proof. The cardinality of a power set is 2 to the power of the set cardinality. By the hypothesis, $|A| = |B| = n$. Therefore, $|P(A)| = 2^n$, and $|P(B)| = 2^n$. ■