sets

cardinality = number of elements in a set

countable sets
- finite sets
- sets which have the same cardinality as the set of positive integers

- notation
$|S| = N_0$

to show that two sets are equal: show that they are subset of each other.

ex
$\overline{A \cap B} = \overline{A} \cup \overline{B}$ → $\overline{A \cap B} \subseteq \overline{A} \cup \overline{B}$ and $\overline{A} \cup \overline{B} \subseteq \overline{A \cap B}$