



## NUMBER OF DISJOINT UNIONS

### Result

We call two sets  $A, B$  *disjoint* or *non-overlapping*<sup>1</sup> if  $A \cap B = \emptyset$ .

**Proposition 1.** *Suppose  $A$  and  $B$  are disjoint finite sets. Then  $|A \cup B| = |A| + |B|$*

This is often called the *addition principle* or the *rule of sum*.

---

<sup>1</sup>Future sheets may move this definition elsewhere.



