Result

We call two sets A, B *disjoint* or *non-overlapping*[1] if $A \cap B = \varnothing$.

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*.

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[1]Future sheets may move this definition elsewhere.

Number of Disjoint Unions

Set Numbers · Natural Sums

Finite Sets

Equivalent Sets · Recursion Theorem

Function Inverses · Natural Order

Function Images · Function Composites · Peano Axioms

Functions · Equivalence Relations

Relations

Natural Induction

Ordered Pair Projections

Set Products

Set Powers

Natural Numbers

Unordered Triples · Partitions · Successor Sets · Intersection of Empty Set

Ordered Pairs · Pair Unions · Set Intersections

Set Unions · Set Differences · Pair Intersections

Unordered Pairs · Empty Set

Set Specification

Set Equality

Set Inclusion

Deductions

Quantified Statements

Logical Statements

Statements

Identities · Sets

Names

Letters · Objects

4