Why

Is there a "smallest" connected graph in a connected graph? How many edges can we remove from a connected graph before it becomes disconnected?

Definition

A *spanning tree of a graph* is subgraph of a graph which is a tree and includes every node.

Spanning Trees

Trees

Undirected Paths

Undirected Graphs   Lists

Set Numbers   Direct Products

Finite Sets

Equivalent Sets

Function Inverses   Natural Order   Family Unions and Intersections

Function Images   Function Composites   Families

Equivalence Relations   Functions   Peano Axioms

Relations   Natural Induction

Set Products

Set Powers   Natural Numbers   Generalized Set Dualities

Partitions   Unordered Triples   Intersection of Empty Set   Successor Sets   Set Dualities   Set Unions and Intersections

Ordered Pairs   Set Intersections   Pair Unions   Set Complements

Set Unions   Set Differences   Pair Intersections

Unordered Pairs   Empty Set

Set Specification

Set Equality

Set Inclusion

Standardized Accounts

Accounts

Deductions

Quantified Statements

Logical Statements

Statements

Identities   Sets

Names

Letters   Objects