Why

We generalize trees and discuss an example of chordal graphs.[1]

Definition

Let $k \in \mathbf{N}$. A k-tree is defined indirectly. Let $G = (V, E)$ be a a complete graph and $|V| = k$.

The complete graph on If A *k-tree* is an undirected graph with at least k vertices. The only k-tree with k vertices is the complete graph.

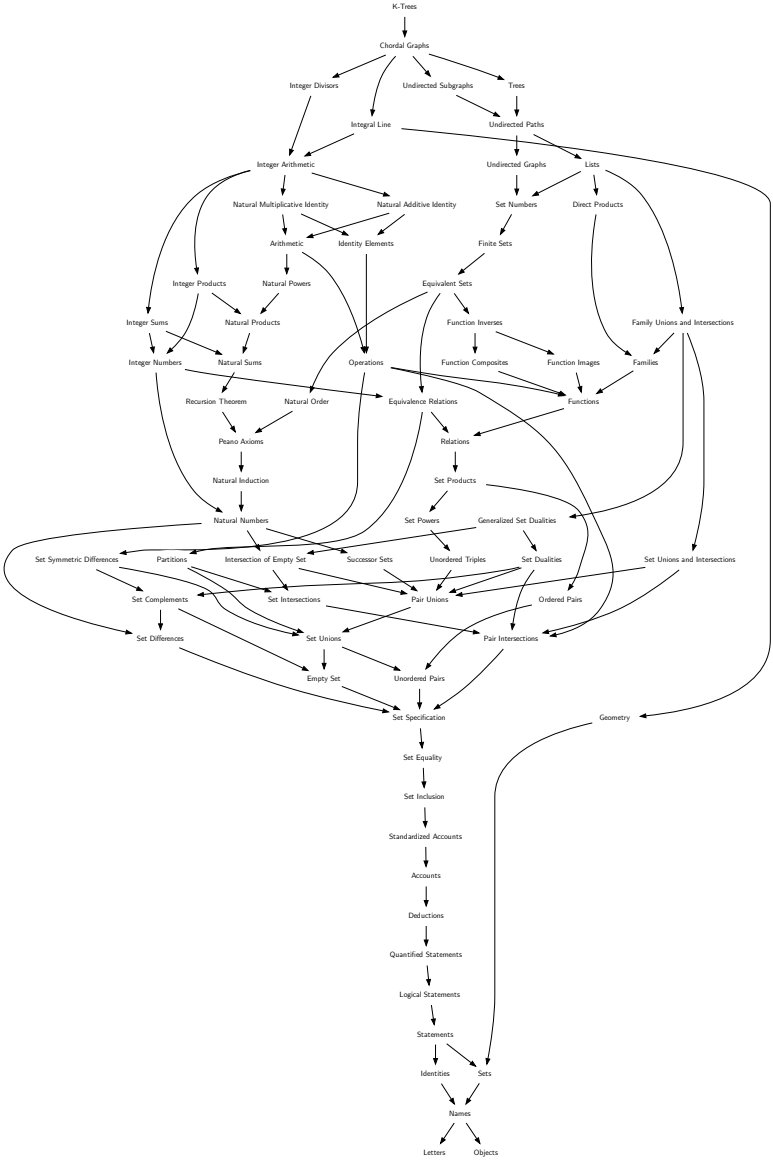
Chordality

Prop. 1. *All k-trees are chordal.*

Proof. Induction on k-tree with k vertices.

□

[1] Future editions will modify, and may introduce k-trees without chordal graphs.


K-Trees
Chordal Graphs
Integer Divisors
Undirected Subgraphs
Trees
Integral Line
Undirected Paths
Integer Arithmetic
Undirected Graphs
Lists
Natural Multiplicative Identity
Natural Additive Identity
Set Numbers
Direct Products
Arithmetic
Identity Elements
Finite Sets
Integer Products
Natural Powers
Equivalent Sets
Integer Sums
Natural Products
Function Inverses
Family Unions and Intersections
Integer Numbers
Natural Sums
Operations
Function Composites
Function Images
Families
Recursion Theorem
Natural Order
Equivalence Relations
Functions
Peano Axioms
Relations
Natural Induction
Set Products
Natural Numbers
Set Powers
Generalized Set Dualities
Set Symmetric Differences
Partitions
Intersection of Empty Set
Successor Sets
Unordered Triples
Set Dualities
Set Unions and Intersections
Set Complements
Set Intersections
Pair Unions
Ordered Pairs
Set Differences
Set Unions
Pair Intersections
Empty Set
Unordered Pairs
Set Specification
Geometry
Set Equality
Set Inclusion
Standardized Accounts
Accounts
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects