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 $\nu m V = k$.

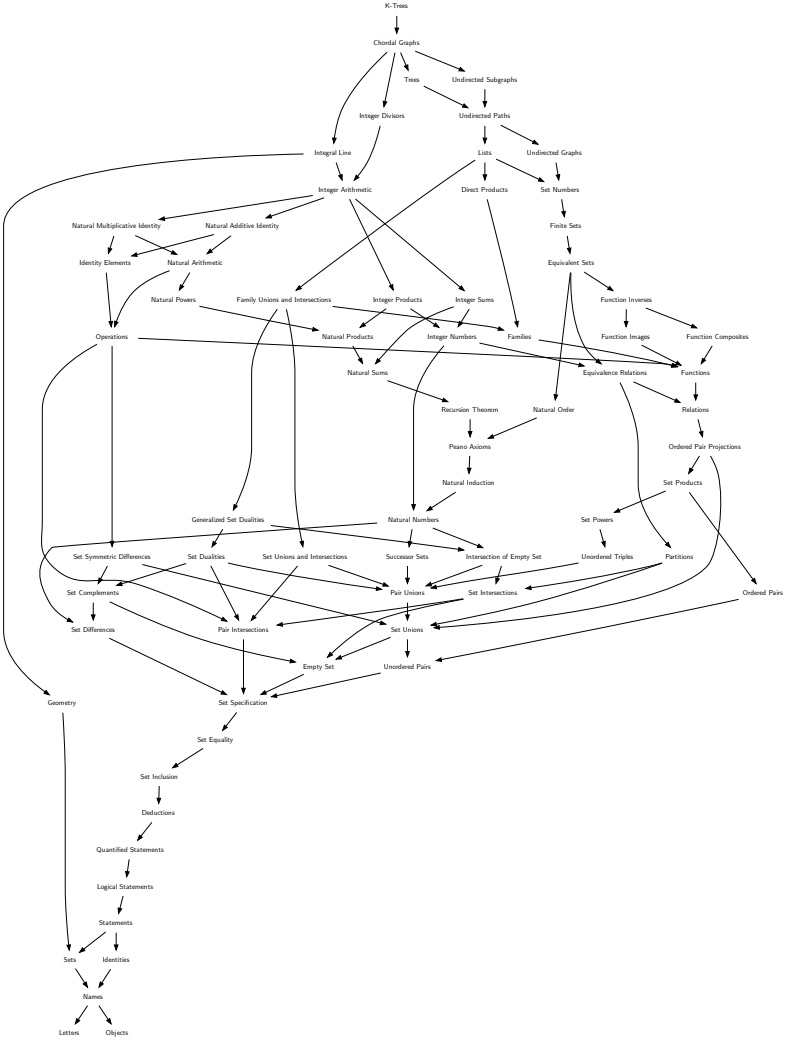
The complete graph on If A *k-tree* is an undirected graph with at least k vertices. The only k-tree with k vertices is the complete graph.

Chordality

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