



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 complete graph and $|V| = k$.

The complete graph on k vertices 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.

□

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

