

## VERTEX SEPARATORS

# Why

#### TODO

#### Definition

A vertex separator for two vertices of an undirected graph is a subset of the vertices of the graph is the vertices are in different connected components of the subgraph induced by the complement of the subset of vertices. A vertex separator is a minimal vertex separator for two vertices if no proper subset of it is a vertex separator for those vertices. Other names for minimal vertex separators are relatively minimal cutsets.

### Result

Proposition 1. A graph is chordal if and only if all minimal vertex separators are complete.

Proof. TODO

