

## Tree Decomposition

- Tree width  $\text{tw}(G) = \min (\min f(G) \text{ load } (T,f)) - 1$
- $(G,T)$

$B : V(T) \rightarrow 2^V(G)$  \* Adjacency and Decomposition

- Width = max load

$\min (\text{width}(T,B))$

**def1 == def2**

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     / \
    *   *
   / \  /\

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$B(v) = \{v, \text{parent}(v)\}$

## 3\*n grid Decomposition

### What makes tw big

- Presence of big clique

$\text{tw}(K_k) = k$