

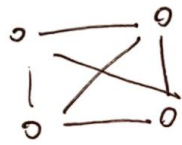
## Writing to the cluster

- Want  $H \geq K$  writes
- problem  $H?$

$$0 < K \leq n < 2K.$$

ie. no replication.

## Heartbeats



Partition in network.  
OR powered off



- every so often, ping peers.
- we want to write to a size  $H \geq K$   
clique of nodes
- every node counts responses.

## 2PC - Commit

1. Generate Tid.

2. Prepare .

- H is agreed upon
- H locks + Write-Ahead Logging .
- $H \geq K$ .

$\Rightarrow$  "majority" of cluster & H healthy nodes.  
& locks acquired & ready for commit.

3a. Abort .

- Unlocks everything from this Tid.
- Retry on random timeout.

3b. Commit.

- Nodes write to KV store
- Unlocks. H times.