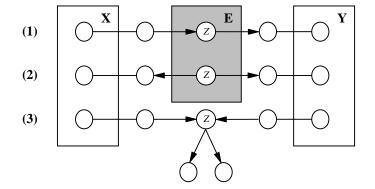
UNCERTAINTY

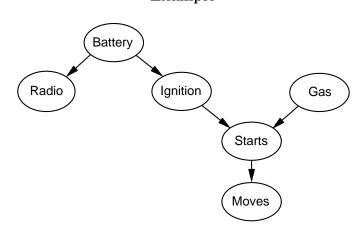
D-separation

- Q: When are nodes X independent of nodes Y given nodes E?
- **A**: When every undirected path from a node in X to a node in Y is **d-separated** by E.

D-separation



Example



Gas and Radio are:

- Independent given Ignition
- $\bullet\,$ Independent given Battery
- Independent given no evidence
- Dependent given Starts
- Dependent given Moves