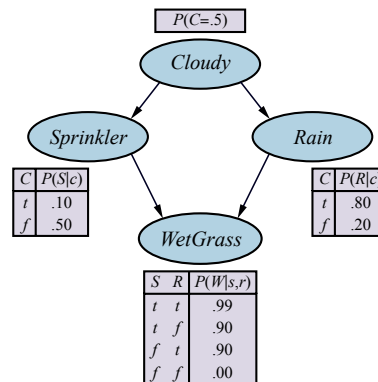


Bayesian Networks Study Guide

Artificial Intelligence

1 Bayesian Networks



1. Given the following Bayes' net:

What is the probability that the grass is wet, the sprinkler didn't run, it rained recently, and it is cloudy?

2. Elsa is unlikely to chew up slippers, $P(\text{ElsaChews}) = 0.1$, Anna is more likely, $P(\text{AnnaChews}) = 0.3$. If the slippers are chewed, whether she or her sister did it, Elsa is likely to go into her crate and look concerned, $P(\text{ElsaConcerned} | \text{SlippersChewed}) = 0.8$. If you were constructing a Bayesian network, in which topological order would you include the variables *ElsaConcerned*, *SlippersChewed*, *ElsaChews*, *AnnaChews*?

