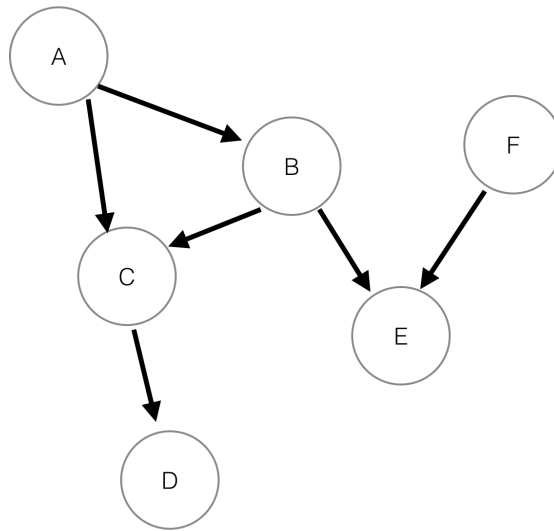
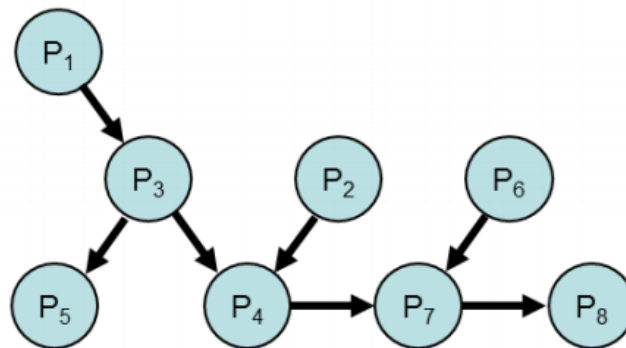


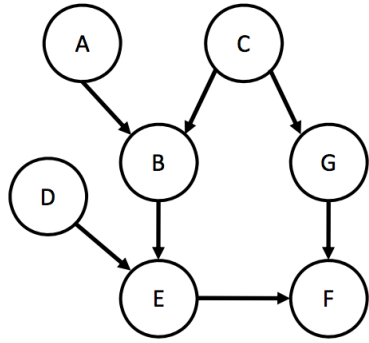
1 Bayesian Network Problems



1. Given this network, calculate $P(B|D = \text{false})$, $P(B|E = \text{true})$ and $P(B|F = \text{false})$. Your solution can be left as a function of the original (implied) CPTs and any additional factors you create.



2. Given the Bayesian Network about, determine:
 - (a) if P1 and P5 are independent of P6 given P8
 - (b) if P2 is independent of P6 given no information
 - (c) if P1 is independent of P2 given P8
 - (d) if P1 is independent of P2 and P5 given P4



3. Given the Bayesian Network above, determine if:

- (a) A is independent of C given F.
- (b) G is independent of D given E.
- (c) C is independent of D.