- 1. Urn *I* contains 2 white and 4 red balls, whereas urn *II* contains 1 white and 1 red ball. A ball is randomly chosen from urn *I* and put into urn *II*, and a ball is then randomly selected from urn *II*. What is the probability that the ball selected from urn *II* is white?
- 2. When Alice spends the day with the babysitter, there is a 0.6 probability that she turns on the TV and watches a show. Her little sister Betty cannot turn the TV on by herself. But once the TV is on, Betty watches with probability 0.8. Tomorrow the girls spend the day with the babysitter.
 - (a) What is the probability that both Alice and Betty watch TV tomorrow?
 - (b) What is the probability that Betty watches TV tomorrow?
 - (c) What is the probability that only Alice watches TV tomorrow?