Exercises

Section 2.1 (1-10)

1. Five numbers, 1, 2, 3, 4, and 5, are participating in a horse race. If there are 5 horses participating, how many ways can the first, second, and third places be assigned?

2. Suppose that there are 4 red, 3 blue, and 2 yellow balls in a bag. A ball is drawn at random from the bag. What is the probability that a red ball is drawn?

3. A college library has five copies of a certain book on reserve. Two of the copies (1 and 2) are first printings, two are second printings, and one is a third printing. A student checks out the books in a random order. What is the probability that the student checks out the two first printings and then the second printings?

4. A survey of 1000 people shows that 600 like baseball, 500 like basketball, and 400 like football. How many people like at least one of these sports?

5. A medical clinic has three doctors, A, B, and C. Each doctor sees patients in the sample space of the experiment. The sample space consists of the events: A sees patients, B sees patients, and C sees patients. What is the probability that a patient seen by doctor A will be treated by doctor B or C?

6. A fair coin is flipped three times. What is the probability of getting at least two heads?