

**Definitions:****Experiment:** pg. 232**Outcomes:** pg. 232**Event:** pg. 232**Probability of an Event:** pg. 232**Probability That an Event Will Not Occur:** pg. 237

**Examples:**

**Die roll:** # 2 pg. 239 A 12-sided die with sides numbered 1 through 12 is rolled. Assuming that all sides are equally likely to be rolled, what is the probability that the number rolled is

- (a) a 5?
- (b) an even number?
- (c) an 11 or 12?

**Deck of cards:** # 8 pg. 239 One card is drawn at random from a deck of cards. What is the probability that the card will be

- (a) a spade?
- (b) a face card?
- (c) is not a spade?

**Coin Toss:** # 14 pg. 240 An experiment consists of tossing a coin three times in a row.

- (a) List all the possible outcomes, where, for example, HHT stands for the outcome where heads appears on the first toss and the second toss, and the third toss is a tail.
- (b) What is the probability of getting exactly two heads?
- (c) What is the probability of getting no heads?
- (d) What is the probability of getting at least one head?

**Rolling two dice:** Suppose two dice are thrown. What is the probability that the sum of the two dice will be

- (a) 6?
- (b) 12?