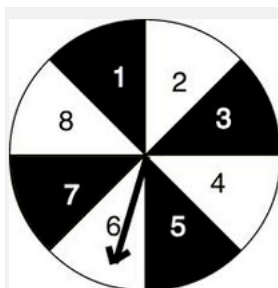## 4.1 Simple Probability

In this worksheet, we will do basic probability problems. If you would like further explanation before attempting these problems, links to video descriptions can be found at the end of this worksheet. Starred problems have video solutions.

1 If a card is chosen at random from a normal deck of cards, what is the probability of choosing a heart

(a) 50%

(b) 25%

(c) 100%

(d) 75%

2 If there are 5 blue marbles, 3 green marbles and 2 red marbles in a bag, what is the probability of choosing a red marble?

(a) 50%

(b) 20%

(c) 30%

(d) 10%

Allie and Tommy use the spinner below in a game and keep track of the number each spin landed on for ten spins.

4,3,1,4,4,2,8,7,5,5

Use this information to answer questions 3-5

3 * What is the experimental probability of spinning a 6?

(a) 10%

(b) 0%

(c) 6%

(d) 60%

4 What is the experimental probability of spinning a 4?

(a) 40%

(b) 30%

(c) 20%

(d) 10%

5 What is the experimental probability of spinning a 7?

   (a) 7%

   (b) 20%

   (c) 10%

   (d) 5%

6 Ashley puts 30 tiles into a bag, 6 of which are vowels. If she takes one out, what is the probability that it is a consonant?

   (a) 20%

   (b) 80%

   (c) 40%

   (d) 60%

7 * There are 20 first graders, 15 second graders and 35 third grades entered into a raffle. What is the probability that a third grader will win?

   (a) 70%

   (b) 50%

   (c) 30%

   (d) 10%

8 Alex rolls a die. What is the probability that he rolls a 2?

   (a) 1/6

   (b) 1/3

   (c) 1/4

   (d) 1/2

9 Ryan flips a coin 20 times and keeps track of how many times it landed heads and how many times it landed tails. If it landed heads 12 times and tails 8, what is the experimental probability of a coin landing tails?

   (a) 60%

   (b) 20%

   (c) 40%

   (d) 80%

10 If there was a bag of gummie bears with 10 red gummies, 6 green gummies and 4 yellow gummies, what is the probability of grabbing a yellow gummie bear?

   (a) 20%

   (b) 50%

   (c) 25%

   (d) 40%

Additional Resources:

- Here you'll find info about probability: `https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-probabil` `cc-7th-basic-prob/v/basic-probability`

- Here you will find the solution to problem 3 `http://youtu.be/bBaAfzBhk0g`

- Here you'll find the solution to problem 7 `http://youtu.be/6Rc3CU8_7lk`