Probability

1. If you toss a coin three times, what is the probability of getting 3 heads?

2. Mr. and Mrs. Romeo are expecting triplets. Suppose the chance of a child being a boy is 50% and of being a girl is 50%. Draw a tree diagram and answer the given questions

   a) P (all three children will be boys)

   b) P (at least two girls)

   c) P (at least one boy and one girl)

3. To win a carnival prize, you need to choose one of 3 doors labelled 1 through 3. Then you need to choose a red, yellow, or a blue box behind each door. What is the probability that the prize is in the blue or yellow box behind door 3?
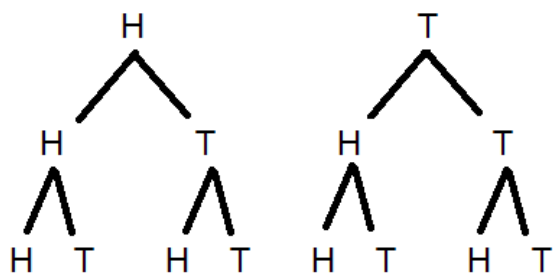
4. You are making an ice cream treat. You have your choice of one flavor, one topping, and one place to hold the ice cream.

Holder	Toppings	Flavor
Waffle cone	Sprinkles	Chocolate
Cup	Oreos	Vanilla
		Strawberry

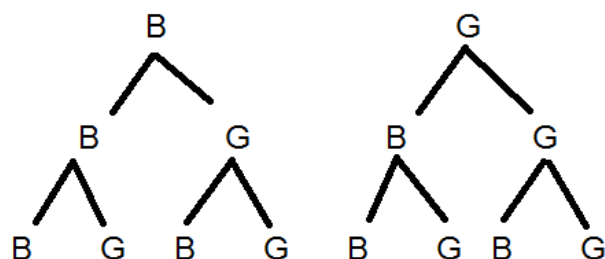Create a tree diagram of the sample space of the event of randomly choosing one holder, one flavor, one topping.
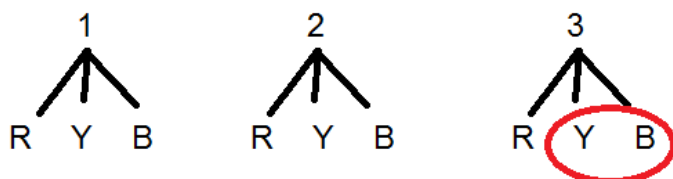
Answers:

1.

Probability = 0.125

2.

a) 1/8
b) ½
c) ¾

3.

4.