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Question 1

(1/1 point)

What is meant by a “simple sample space”?

- (•) a. A sample space where all outcomes are equally likely ✔
- ( ) b. A sample space where outcomes are normally distributed
- ( ) c. A sample space where all outcomes are mutually exclusive and collectively exhaustive
- ( ) d. A sample space where all outcomes have a 50% chance of occurring.

EXPLANATION

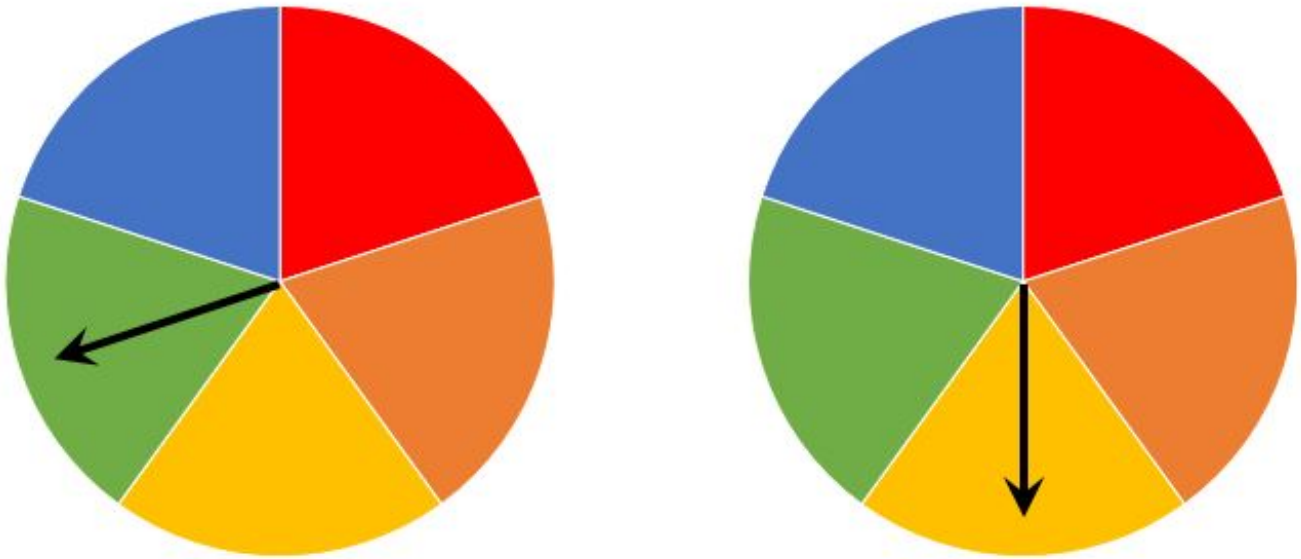
As discussed in lecture, a “simple sample space” is defined as a sample space where each of the possible outcomes are equally likely.

You have used 2 of 2 submissions

Question 2

(1/1 point)

Let's go through an example of a simple sample space. Suppose that you have two spinners which you can spin to point towards red, orange, yellow, green, or blue with equal probability. If you spin each spinner once, what is the probability that **both** of the spinners will point to blue?



- a. 9/25

b. 1/10

c. 1/25 ✔

d. 1/5

EXPLANATION

The probability that both of spinners points to blue is 1/25. If you spin both spinners, there are 5 x 5 = 25 possible combinations. In only one of these combinations do both spinners turn up as blue, so the probability that both spinners point to blue is 1/25.

You have used 2 of 2 submissions

Question 3

(1/1 point)

Using the same spinner example as before, what is the probability that at least one of the spinners points to blue?

a. 9/25 ✔

b. 1/10

c. 1/25

d. 1/5

EXPLANATION

The probability that both of the spinners points to blue is 1/25. This is an example where each of the pairings of two colors is equally likely. Out of 25 possible outcomes, we only have to count the number of outcomes that involve at least one of the spinners pointing to blue. There are 9 such possible combinations, so we know that the probability that at least one of the spinners points to blue is 9/25.

Outcome Number	Spinner 1	Spinner 2
1	Red	Red
2	Red	Orange
3	Red	Yellow
4	Red	Green
5	Red	Blue
6	Orange	Red
7	Orange	Orange
8	Orange	Yellow

9	Orange	Green
10	Orange	Blue
11	Yellow	Red
12	Yellow	Orange
13	Yellow	Yellow
14	Yellow	Green
15	Yellow	Blue
16	Green	Red
17	Green	Orange
18	Green	Yellow
19	Green	Green
20	Green	Blue
21	Blue	Red
22	Blue	Orange
23	Blue	Yellow
24	Blue	Green
25	Blue	Blue

You have used 1 of 2 submissions