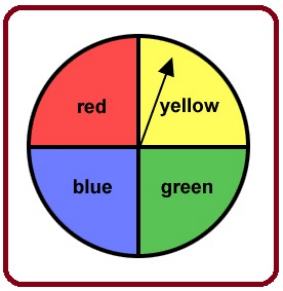
Name _____ Date _____ Class_____

Probability Quiz

1.) **Janiyah spins the spinner below, and records the results in the table below. How does the experimental probability of spinning yellow compare with the theoretical probability of spinning yellow?**



Results:

Color	Red	Yellow	Green	Blue
Frequency	3	6	4	7

a. Theoretically, Janiyah would have expected to land on yellow one more time than she did experimentally.

b. Theoretically, Janiyah would have expected to land on yellow one less time than she did experimentally.

c. The theoretic and experimental probabilities of landing on yellow are the same.

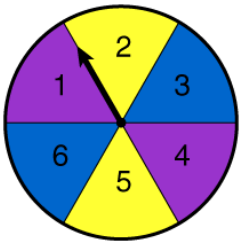
d. It is impossible to compare theoretic and experimental probabilities.

2.) **Which of the following spinners, gives you the best chance of landing on the number "3"?**

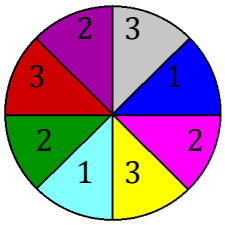
A.

B.

C.



D.



3.) **In order to win a board game in math class, Jaden must roll a factor of 18 on a standard number cube. How likely is it that Jaden will win the game?**

a. impossible b. unlikely c. equally as likely as not d. likely e. certain

4.) **There is a 0.09 chance that Emily will be selected to go on the school trip to Washington DC. What is the probability that Emily will NOT go on the school trip?**

a. 9% b. 90% c. 91% d. 10% e. 99%

5.) **Abby pulled marbles from a large jar, recorded the color of each marble, and then replaced the marble back into the jar. The first 8 marbles that Abby pulled are shown in the table below. If Abby plans to pull 40 more marbles, how many should she expect to be red?**

Draw	1	2	3	4	5	6	7	8
Color	red	blue	blue	green	red	red	blue	green

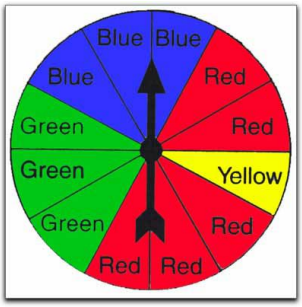
a. 3 of the 40 marbles will be red

b. 10 of the 40 marbles will be red

c. 24 of the 40 marbles will be red

d. 15 of the 40 marbles will be red

6.) **Dylan spins the spinner below 48 times. Which of the following shows the results that Dylan would expect to get according to the theoretical probability?**



a. 3 yellow, 10 blue, 10 green and 25 red

b. 4 yellow, 12 blue, 12 green and 20 red

c. 4 yellow, 10 blue, 14 green and 20 red

d. 3 yellow, 12 blue, 12 green and 21 red

7.) **Avery flipped a coin 24 times, and recorded the results in the box below. Which of the following best describes the difference between the experimental and theoretical probability of flipping heads?**

h, t, t, h, t, t, t,
h, t, t, h, t, t, t,
h, t, t, t, t, h, t,
t, t, t

a. According to theoretical probability, Avery would have expected to land on heads ten more times than she did experimentally.

b. According the theoretical probability, Avery would have expected to land on heads half as many times as she did experimentally.

c. According to theoretical probability, Avery would have expected to land on heads twice as many times as she did experimentally.

d. According to theoretical probability, Avery would have expected to land on heads 12 more times than she did experimentally.

8.) **There are 30 students in Mr. Washington's homeroom. 18 of them ride the bus home from school. If Mr. Washington selects a student at random, what is the probability that they will NOT ride the bus?**

a. 60% b. 82% c. 18% d. 40% e. 20%