

Name _____ Date _____ Class _____

Compound Probability Quiz

A stack of cards contains the 16 cards shown to the right.

Use these cards to answer questions 1-3:

3	2	7	6
9	4	8	3
2	8	6	2
6	5	9	6

- 1.) What is the probability that Amelia selects an odd number from the deck, replaces it, and then selects another odd number?

a. $\frac{9}{64}$ b. $\frac{1}{8}$ c. $\frac{3}{8}$ d. $\frac{7}{54}$

- 2.) What is the probability that Erica selects an even number from the deck, does not replace it, and then selects another even number?

a. $\frac{25}{64}$ b. $\frac{5}{14}$ c. $\frac{3}{8}$ d. $\frac{1}{15}$

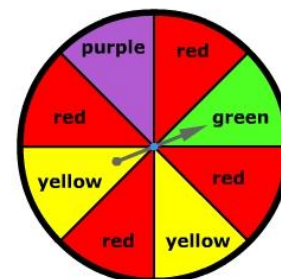
- 3.) What is the probability that Josh selects a two, does not replace it, and then selects a six?

a. $\frac{3}{64}$ b. $\frac{3}{80}$ c. $\frac{1}{18}$ d. $\frac{1}{20}$

Use the standard number cube, and spinner below to answer questions 4 and 5:

- 4.) What is the probability that a number greater than 4 is rolled on the number cube, and a yellow is spun on the spinner?

a. $\frac{1}{6}$ b. $\frac{1}{12}$ c. $\frac{1}{4}$ d. $\frac{1}{3}$



- 5.) What is the probability that you roll a number that is a factor of 24, and spin purple?

a. $\frac{5}{48}$ b. $\frac{1}{12}$ c. $\frac{1}{16}$ d. $\frac{4}{49}$

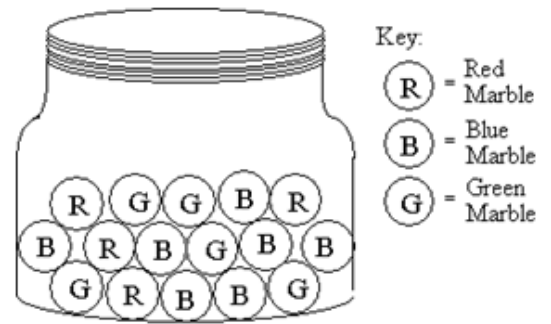
- 6.) Kevin's sock drawer contains 6 white socks, 4 black socks, 3 grey socks, and 5 red socks. If Kevin randomly picks two socks, what is the probability that they are both white?

a. $\frac{1}{9}$ b. $\frac{3}{17}$ c. $\frac{5}{54}$ d. $\frac{5}{51}$

Use the jar of marbles to answer questions 7 and 8.

7.) Nadia selects three marbles from the jar to the right without replacing them. What is the probability that all three marbles are blue?

- a. $\frac{1}{16}$ b. $\frac{1}{18}$ c. $\frac{1}{9}$ d. $\frac{1}{25}$

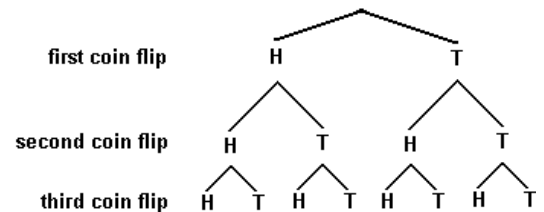


8.) Mills selects two marbles from the jar. What is the probability that Mills picks a red marble, puts it in his pocket, and then selects a blue marble?

- a. $\frac{7}{64}$ b. $\frac{1}{15}$ c. $\frac{7}{60}$ d. $\frac{1}{19}$

9.) Sophia flipped a coin three times, and drew the tree diagram below to show the possible outcomes. Use the tree diagram to find the probability that she flipped at least two tails.

- a. $\frac{1}{4}$ b. $\frac{1}{2}$ c. $\frac{3}{4}$ d. $\frac{1}{8}$



10.) Ella and Lindsay are both in Mr. Goldman's math class. There are 24 students in the class. If he randomly selects two students to participate in the math bowl, what is the probability that both Ella and Lindsay are selected?

- a. $\frac{1}{576}$ b. $\frac{1}{276}$ c. $\frac{1}{288}$ d. $\frac{1}{343}$



Bonus: Josephine rolled a pair of number cubes. What is the probability that the two numbers rolled had a sum greater than 8?

