

NAME _____

DATE _____

PROBABILITY: Worksheet 3

Find the probability for the following. Give your answer as a fraction in lowest terms and as a percent.

- 1) A drawer has only 15 socks in it. They are all white. What is the probability of drawing a black sock?

A bag has 14 red marbles, 19 blue marbles and 17 green marble. If you draw only one marble at random, what are the following probabilities?

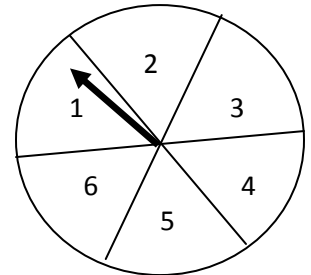
- 2) A blue marble?

- 3) A red marble?

- 4) A green marble?

- 5) What is the probability the spinner will land on the number 1?

- 6) What is the probability the spinner will land on an odd number?



- 7) A cookie jar has 50 chocolate chip cookies, 24 peanut butter cookies and 26 oatmeal cookies. What is the probability that you would randomly take out one cookie and it was a peanut butter cookie?

- 8) A local grocery store gave out 80 tickets to 80 different people for next Saturday's drawing. The owners of the store drew one ticket at random for a \$200 gift certificate. James has one of the tickets. What is the probability that he will have the winning ticket?

We add favorable outcomes when we use the word "or" in a probability problem.

A bag of marbles includes 1 blue, 14 yellow and 5 red.

- 9) What is the probability of randomly drawing one marble from the bag and it would be blue **or** yellow?

- 10) What is the probability of randomly drawing one marble from the bag and it would be yellow **or** red?

KEY

PROBABILITY: Worksheet 3

Find the probability for the following. Give your answer as a fraction in lowest terms and as a percent.

- 1) A drawer has only 15 socks in it. They are all white. What is the probability of drawing a black sock?

0 or 0%

A bag has 14 red marbles, 19 blue marbles and 17 green marble. If you draw only one marble at random, what are the following probabilities?

2) A blue marble? $\frac{19}{50} = 38\%$

3) A red marble? $\frac{14}{50} = \frac{7}{25} = 28\%$

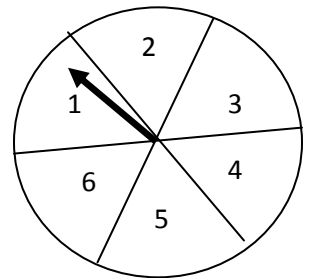
4) A green marble? $\frac{17}{50} = 34\%$

- 5) What is the probability the spinner will land on the number 1?

$$\frac{1}{6} = 16.\bar{6}\%$$

- 6) What is the probability the spinner will land on an odd number?

$$\frac{3}{6} = \frac{1}{2} = 50\%$$



- 7) A cookie jar has 50 chocolate chip cookies, 24 peanut butter cookies and 26 oatmeal cookies. What is the probability that you would randomly take out one cookie and it was a peanut butter cookie?

$$\frac{24}{100} = \frac{3}{25} = 12\%$$

- 8) A local grocery store gave out 80 tickets to 80 different people for next Saturday's drawing. The owners of the store drew one ticket at random for a \$200 gift certificate. James has one of the tickets. What is the probability that he will have the winning ticket?

$$\frac{1}{80} = 1.25\%$$

We add favorable outcomes when we use the word "or" in a probability problem.

A bag of marbles includes 1 blue, 14 yellow and 5 red.

- 9) What is the probability of randomly drawing one marble from the bag and it would be blue **or** yellow?

$$\frac{1+14}{20} = \frac{15}{20} = \frac{3}{4} = 75\%$$

- 10) What is the probability of randomly drawing one marble from the bag and it would be yellow **or** red?

$$\frac{14+5}{20} = \frac{19}{20} = 95\%$$