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NAME	DATE

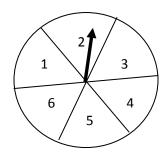
PROBABILITY: Worksheet 4

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

1) A drawer has only 8 socks in it. They are all blue. What is the probability of drawing a blue sock?

A bag has 12 red marbles, 3 blue marbles and 10 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 2?
- 6) What is the probability the spinner will land on a number less than 4?



- 7) A cookie jar has 16 chocolate chip cookies, 14 peanut butter cookies and 20 oatmeal cookies. What is the probability that you would randomly take out one cookie and it was a chocolate chip cookie?
- 8) Tyler was one of 200 participants at the Bingo party. Each participant received one ticket for a door prize drawing. What was the probability that Tyler would win the door prize?

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

A bag of marbles includes 2 blue, 11 yellow and 12 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?

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KEY

PROBABILITY: Worksheet 4

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

1) A drawer has only 8 socks in it. They are all blue. What is the probability of drawing a blue sock?

A bag has 12 red marbles, 3 blue marbles and 10 green marble. If you draw only one marble at random, what are the following probabilities?

- 2) A blue marble? $\frac{3}{25} = 12\%$
- 3) A red marble? $\frac{12}{25} = 48\%$
- 4) A green marble? $\frac{10}{25} = \frac{2}{5} = 40\%$
- 5) What is the probability the spinner will land on the number 2?

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

6) What is the probability the spinner will land on a number less than 4?

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

7) A cookie jar has 16 chocolate chip cookies, 14 peanut butter cookies and 20 oatmeal cookies. What is the probability that you would randomly take out one cookie and it was a chocolate chip cookie?

$$\frac{16}{50} = \frac{8}{25} = 32\%$$

8) Tyler was one of 200 participants at the Bingo party. Each participant received one ticket for a door prize drawing. What was the probability that Tyler would win the door prize?

$$\frac{1}{200} = .5\%$$

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

A bag of marbles includes 2 blue, 11 yellow and 12 red.

9) What is the probability of randomly drawing one marble from the bag and it would be blue <u>or</u> yellow?

$$\frac{2+11}{25} = \frac{13}{25} = 52\%$$

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

$$\frac{11+12}{25} = \frac{23}{25} = 92\%$$

