

NAME

Key

Introduction to Probability

Basic Probability Notation

$$P(\quad) = \underline{\hspace{2cm}}$$

Example:

1. What types of shoes are you wearing today?

Tennis shoes =

Sandals =

Other =

Total =

2. Find...

a. $P(\text{sandals}) =$

b. $P(\text{tennis shoes}) =$

c. $P(\text{other}) =$

3. Based on this information, if Mrs. Thelen sees 110 students today, how many will be wearing sandals?

Theoretical Probability:

Experimental Probability:

Practice Using Experimental and Theoretical Probability

1. Rolling a 6-sided dice 10 times.

a. What is the theoretical probability of rolling the #5?

$$\frac{1}{6}$$

b. What is the experimental probability of rolling the #5?

Answers will vary

c. What is the theoretical probability of rolling a prime number?

$$\frac{4}{6} = \frac{2}{3}$$

d. What is the experimental probability of rolling a prime number?

Answers will vary

2. Drawing from a deck of cards 10 times.

a. a. What is the theoretical probability of drawing a heart?

$$\frac{13}{52} = \frac{1}{4}$$

b. What is the experimental probability of drawing a heart?

Answers will vary

c. What is the theoretical probability of drawing a king?

$$\frac{4}{52} = \frac{1}{13}$$

d. What is the experimental probability of drawing a king?

Answers will vary