

## Section 11-1 Review

Directions: Determine whether each event is impossible, unlikely, as likely as not, likely, or certain.

1. rolling a number greater than 5 on a number cube \_\_\_\_\_
2. drawing a blue chip from a bag of purple and green chips \_\_\_\_\_
3. rolling an even number on a number cube labeled 1 through 6 \_\_\_\_\_
4. rolling a 6 on a number cube five times in a row \_\_\_\_\_
5. The probability of rolling a 5 or 6 with a number cube is  $\frac{1}{3}$ . What is the probability of not rolling a 5 or 6?
6. The probability of drawing a red marble from a bag of marbles is  $\frac{1}{6}$ . What is the probability of not drawing a red marble?

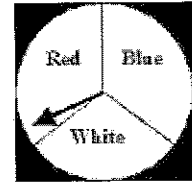
## Section 11-2 Review

Directions: Find the experimental probability. Write your answer as a fraction, as a decimal, and as percent.

1. Jenny is a soccer goalie. If she has 21 out of 25 saves in practice, what is the experimental probability that she will have a save on the next shot?
2. If Kade hit the bull's eye 3 out of 8 times at archery practice, what is the experimental probability that he will hit the bull's-eye on his next try?
3. Kelly inspects new pants at a factory. Of the first 56 pairs of pants he inspected, 49 were acceptable. What is the experimental probability that the next pair of pants will be acceptable?
4. Darian made 26 out of 32 free throws he attempted. Which percent is closest to the experimental probability that he will make his next free throw?
  - a. 50%
  - b. 60%
  - c. 70%
  - d. 80%
5. Survey results show that cheese is the favorite pizza topping for 18 out of 24 people. Which percent is closest to the experimental probability that a person's favorite pizza topping will NOT be cheese?
  - a. 25%
  - b. 33%
  - c. 40%
  - d. 75%

### Section 11-3 Review

1. Marcus spins the spinner at the right and flips a dime at the same time. What are the possible outcomes? How many outcomes are in the sample space?



2. For lunch, Britney has a choice of a hot dog, a hamburger, or pizza and choice of an apple, a pear, or grapes. What are all the possible choices of lunch she can have? How many outcomes are in the sample space?

3. Amber rolls two number cubes. How many outcomes are possible?

- a. 6
- b. 12
- c. 24
- d. 36

4. A sandwich shop offers 3 choices of breads: white, rye, or garlic; 2 choices of cheese: American or Swiss; and 4 choices of meats: beef, turkey, ham, or pork. List the possible choices for a sandwich with 1 bread, 1 cheese, and 1 meat. How many possible choices are there?

### Section 11-4 Review

Directions: Find the probability of each event. Write your answer as a fraction, as a decimal, and as a percent.

1. rolling a number greater than 1 on a number cube
2. randomly choosing an orange disk from a bag of 14 disks, 4 blue disks, and 12 orange disks
3. spinning a number less than 7 on a fair spinner with 8 equal sections labeled 1-8
4. There are 5 red marbles, 7 green marbles, and 3 yellow marbles in a bag. A marble is drawn at random. What is the probability that the marble will NOT be yellow?

Section 11-1 Review

Key

Directions: Determine whether each event is impossible, unlikely, as likely as not, likely, or certain.

- rolling a number greater than 5 on a number <sup>cube</sup> unlikely
- drawing a blue chip from a bag of purple and green chips impossible
- rolling an even number on a number cube labeled 1 through 6 as likely as not
- rolling a 6 on a number cube five times in a row unlikely
- The probability of rolling a 5 or 6 with a number cube is  $\frac{1}{3}$ . What is the probability of not rolling a 5 or 6?  
 $\frac{2}{3}$
- The probability of drawing a red marble from a bag of marbles is  $\frac{1}{6}$ . What is the probability of not drawing a red marble?  
 $\frac{5}{6}$

Section 11-2 Review

Directions: Find the experimental probability. Write your answer as a fraction, as a decimal, and as percent.

- Jenny is a soccer goalie. If she has 21 out of 25 saves in practice, what is the experimental probability that she will have a save on the next shot?

$$\frac{21}{25} = 0.84 = 84\%$$

- If Kade hit the bull's eye 3 out of 8 times at archery practice, what is the experimental probability that he will hit the bull's-eye on his next try?

$$\frac{3}{8} = 0.375 = 37.5\%$$

- Kelly inspects new pants at a factory. Of the first 56 pairs of pants he inspected, 49 were acceptable. What is the experimental probability that the next pair of pants will be acceptable?

$$\frac{49}{56} = 0.875 = 87.5\%$$

- Darian made 26 out of 32 free throws he attempted. Which percent is closest to the experimental probability that he will make his next free throw?

- 50%
- 60%
- 70%

$$\frac{26}{32} = 0.8125$$

- ~~80%~~

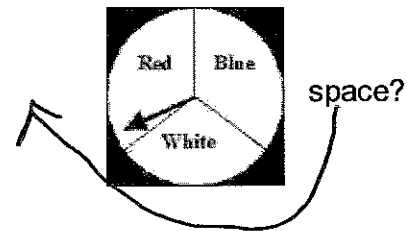
- Survey results show that cheese is the favorite pizza topping for 18 out of 24 people. Which percent is closest to the experimental probability that a person's favorite pizza topping will NOT be cheese?

- 25%
- 33%
- 40%
- 75%

$$\frac{18}{24} \text{ the rest } \frac{6}{24} = 0.25$$

Section 11-3 Review

1. Marcus spins the spinner at the right and flips a dime at the same time. What are the possible outcomes? How many outcomes are in the sample space?



- <sup>R, W, B</sup>  
<sup>H, T</sup>  
 H-R  
 H-W  
 H-B  
 T-R  
 T-W  
 T-B

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2. For lunch, Britney has a choice of a hot dog, a hamburger, or pizza and choice of an apple, a pear, or grapes. What are all the possible choices of lunch she can have? How many outcomes are in the sample space?

- <sup>D</sup> <sup>H</sup> <sup>P</sup> <sup>A</sup> <sup>P</sup>  
 DA HA PA  
 DP HPe PPe  
 DG HGr PGr

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3. Amber rolls two number cubes. How many outcomes are possible?

- a. 6  
 b. 12  
 c. 24  
d. 36

$6 \cdot 6$   
 $36$

4. A sandwich shop offers 3 choices of breads: white, rye, or garlic; 2 choices of cheese: American or Swiss; and 4 choices of meats: beef, turkey, ham, or pork. List the possible choices for a sandwich with 1 bread, 1 cheese, and 1 meat. How many possible choices are there?

- <sup>W</sup> <sup>R</sup> <sup>G</sup> <sup>A</sup>  
<sup>B</sup> <sup>T</sup> <sup>H</sup> <sup>P</sup>  
 WAB WSB RAB RSB GAB GSB  
 WAT WST RAT RST GAT GST  
 WAH WSH RAH RSH GAH GSH  
 WAP WSP RAP RSP GAP GSP

$3 \cdot 2 \cdot 4 = 24$

Section 11-4 Review

Directions: Find the probability of each event. Write your answer as a fraction, as a decimal, and as a percent.

1. rolling a number greater than 1 on a number cube

$\frac{5}{6} = 0.83 = 83\%$

2. randomly choosing an orange disk from a bag of 14 disks, 4 blue disks, and 12 orange disks

$\frac{12 \div 6}{30 \div 6} = \frac{2}{5} = 0.4 = 40\%$

3. spinning a number less than 7 on a fair spinner with 8 equal sections labeled 1-8

$\frac{6 \div 2}{8 \div 2} = \frac{3}{4} = 0.75 = 75\%$

4. There are 5 red marbles, 7 green marbles, and 3 yellow marbles in a bag. A marble is drawn at random. What is the probability that the marble will NOT be yellow?

$\frac{12 \div 3}{15 \div 3} = \frac{4}{5} = 0.8 = 80\%$