Name _____ Date _____ Class _____
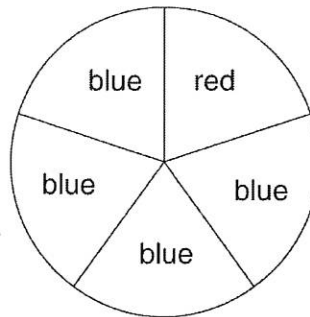
PROBABILITY REVIEW

Introduction to Probability

Write *impossible, unlikely, as likely as not, likely,* or *certain* to describe each event.

1. landing on blue _____

2. landing on red _____

3. Next week will have 7 days.

   _____

4. You will grow to be 80 feet tall.

   _____

Write each probability as a decimal and as a fraction.

5. There is a 50% chance of rain tomorrow. _____

6. There is a 23% chance of snow tomorrow. _____

7. There is a 39% chance of hail tomorrow. _____

Compare probabilities.

8. Are you more likely to win third prize or fourth prize?

   _____

9. Are you more likely to win fifth prize or second prize?

   _____

| Contest Winning Probabilities	
First Prize	1%
Second Prize	9%
Third Prize	20%
Fourth Prize	25%
Fifth Prize	45%

10. Are you more likely to win fourth prize or first prize? _____

11. A Valentine's Day candy jar has the same number of red and pink jellybeans. Which term best describes the probability of picking a red jellybean: impossible, likely, as likely as not, unlikely, or impossible? _____

12. Beth has a penny, a quarter, two nickels, and a dime in her pocket. Which coin is she most likely to pull out of her pocket? _____

LESSON
12-2 *Experimental Probability*

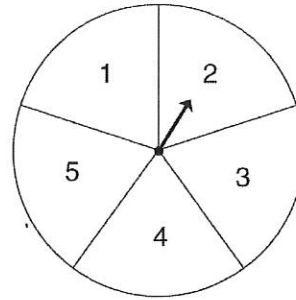**For each experiment, identify the outcome shown.**

13.
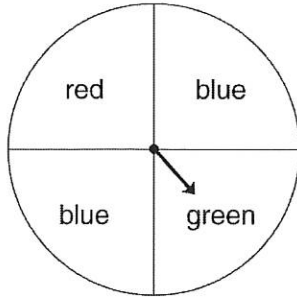
outcome: _____

14.

outcome: _____

Amanda has a standard deck of playing cards. She picked one card, recorded the suit, and placed it back in the deck. She repeated this process several times and recorded her results in the table.

15. Find the experimental probability that a card selected from the deck will be a spade.

_____

16. Find the experimental probability that a card selected from the deck will be a diamond.

_____

Heart	ЖI II
Diamond	IIII
Spade	ЖI
Club	ЖI III

17. Based on Amanda's experiment, which card suit is she most likely to select from the deck?

_____

18. Based on Amanda's experiment, which card suit is she least likely to select from the deck?

_____

19. In 28 coin tosses, John got tails up 14 times. What is the experimental probability that John will get tails up on his next toss?

_____

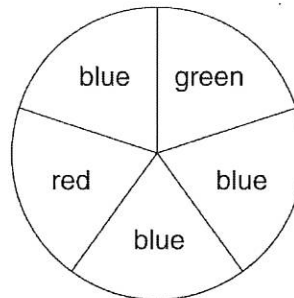Holt McDougal Mathematics

LESSON
12-4   *Theoretical Probability*

Find the probability of each event using the spinner.

20. landing on blue _____

21. landing on red _____
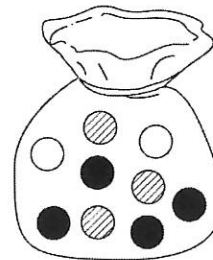
22. landing on green _____

23. NOT landing on blue _____

Find the probability of each event using the bag of marbles.

24. picking a black marble _____

25. picking a striped marble _____

26. picking a white marble _____

27. NOT picking a white marble _____

A standard number cube is rolled. Find each probability.

28. $P(2)$ _____   29. P(even number) _____

30. P(4 or 5) _____   31. P(odd number) _____

32. Out of 10 fair coin tosses, a coin landed tails up 4 times. How does this experimental probability of a fair coin landing tails up compare to the theoretical probability of the same event?

_____

_____

33. The probability of a spinner landing on blue is $\frac{3}{4}$. What is the probability of it NOT landing on blue written as a percent?

_____