Name _____ Date _____ Class _____

LESSON 10-4

Practice B

Theoretical Probability

An experiment consists of rolling one fair number cube. Find the probability of each event.

1. $P(3)$ _____

2. $P(7)$ _____

3. $P(1 \text{ or } 4)$ _____

4. $P(\text{not } 5)$ _____

5. $P(< 5)$ _____

6. $P(> 4)$ _____

7. $P(2 \text{ or odd})$ _____

8. $P(\leq 3)$ _____

An experiment consists of rolling two fair number cubes. Find the probability of each event.

9. $P(\text{total shown} = 3)$ _____

10. $P(\text{total shown} = 7)$ _____

11. $P(\text{total shown} = 9)$ _____

12. $P(\text{total shown} = 2)$ _____

13. $P(\text{total shown} = 4)$ _____

14. $P(\text{total shown} = 13)$ _____

15. $P(\text{total shown} > 8)$ _____

16. $P(\text{total shown} \leq 12)$ _____

17. $P(\text{total shown} < 7)$ _____

18. A bag contains 9 pennies, 8 nickels, and 5 dimes. How many quarters should be added to the bag so the probability of drawing a dime is $\frac{1}{6}$? _____

19. In a game two fair number cubes are rolled. To make the first move, you need to roll a total of 6, 7, or 8. What is the probability that you will be able to make the first move? _____

Name _____ Date _____ Class _____

LESSON 10-2

Practice A

Experimental Probability

The results of an unbiased survey show the favorite instruments of 8th graders. Estimate the probability of each.

Result	Piano	Drums	Trombone	Flute	Violin	Clarinet
Number	1	4	42	38	12	3

1. a student chooses clarinet

_____

2. a student chooses drums

_____

3. a student chooses flute

_____

4. a student chooses piano

_____

5. a student chooses trombone

_____

6. a student chooses violin

_____

A can contains color chips in 5 different colors. Thomas took a sample from the can and counted the colors. His results are in the table below.

Color	Blue	Pink	Black	White	Green
Number	10	5	20	30	15

7. Use the table to compare the probability that Thomas chooses a pink color chip to the probability that he chooses a white color chip.

_____

8. Use the table to compare the probability that Thomas chooses a green color chip to the probability that he chooses a blue color chip.

_____

9. Cheryl surveyed 30 students who ride the bus to school, 8 who walk, 9 who ride bicycles, and 3 who ride in cars. Estimate the probability that the next student Cheryl surveys will walk to school.

_____