Name _____ Class _____ Date _____

Practice 9-2

Experimental Probability

Suppose you observe the color of socks worn by students in your class: 12 have white, 4 have black, 3 have blue, and 1 has red. Find each experimental probability as a fraction in simplest form.

1. P(white) _____ **2.** P(red) _____ **3.** P(blue) _____

4. P(black) _____ **5.** P(yellow) _____ **6.** P(black or red) _____

Use the data in the table at the right for Exercises 7–12. Find each experimental probability as a percent.

7. P(fruit) _____ **8.** P(granola) _____

9. P(pretzels) _____ **10.** P(carrots) _____

11. P(not fruit) _____ **12.** P(granola or chips) _____

Favorite Snack Survey Results

Snack	Number of Students
Fruit	8
Granola	2
Pretzels	3
Chips	7
Carrots	5

13. Do an experiment to find the probability that a word chosen randomly in a book is the word *the*. How many words did you look at to find P(the)? What is P(the)?

_____

14. Suppose the following is the result of tossing a coin 5 times:

heads, tails, heads, tails, heads

What is the experimental probability for heads?

_____

Solve.

15. The probability that a twelve-year-old has a brother or sister is 25%. Suppose you survey 300 twelve-year-olds. About how many do you think will have a brother or sister? _____

16. a. A quality control inspector found flaws in 13 out of 150 sweaters. Find the probability that a sweater has a flaw. Round to the nearest tenth of a percent. _____

b. Suppose the company produces 500 sweaters a day. How many will not have flaws? _____

c. Suppose the company produces 600 sweaters a day. How many will have flaws? _____