Extra Practice!

Lesson 10 Problem Solving

A local store is running a contest. Each time you enter the store you get a ticket. The sign below shows the probability of winning a prize. Use the sign below to solve each problem. Write each probability in simplest form.

BRUNS' SHOE STORE	
Chances of winning:	
Prize	*Number of Tickets*
Grand prize	1
Second prize	5
Third prize	10
Fourth prize	20
Fifth prize	25
Total number of tickets to be given out: 1,000	

1. What is the probability of winning the grand prize? $\frac{1}{1000} = .001$

The probability is .1 %.

2. What is the probability of winning the second prize? $\frac{5}{1000} = .005$

The probability is .5 %.

3. What is the probability of winning the fifth prize? $\frac{25}{1000} = .025$

The probability is 2.5 %.

4. What is the probability of not winning any prize? $1000 - 61 = 939$ $\frac{939}{1000} = .939$

The probability is 93.9 %.

One person will be selected at random to represent the company at a special event. The table below shows how many people volunteered to be selected. Each name is written on a slip of paper, and one slip is to be drawn. Use the table to solve each problem. Write each probability in simplest form.

Department	*Women*	*Men*
A	0	5
B	6	1
C	2	10
D	12	4
	20	20

5. What is the probability that a woman will be selected? $\frac{20}{40} = \frac{1}{2}$

The probability is 50 %.

6. What is the probability that a person from Department C will be selected? $\frac{12}{40} = .3$

The probability is 30 %.

7. What is the probability that a woman from Department A will be selected?

The probability is 0 %.