

Name \_\_\_\_\_

# 8-1A Lesson Master

## Questions on SPUR Objectives

See pages 521–523 for objectives.

### USES Objective H

1. Suppose a test consists of ten multiple-choice questions with five choices each. How many different test papers are possible?

a. Write your answer in exponential form. \_\_\_\_\_

b. Write your answer in base 10. \_\_\_\_\_

c. Write your answer in scientific notation. \_\_\_\_\_

2. Señora Attencio wrote a quiz for her Spanish class that consisted of five true-false questions and three multiple-choice questions with four choices each.

a. How many different quiz papers are possible? \_\_\_\_\_

b. If a student in Señora Attencio's class guessed on every question, what is the probability the student would get all 8 questions correct? \_\_\_\_\_

3. Over the years, Colorado license plates have had the following two formats.

1958–1985: Two-alpha county code followed by four digits

1985–Present: Three-alpha county code followed by three digits

a. How many different license plates were possible in Colorado from 1958–1985? \_\_\_\_\_

b. How many more different license plates are possible in Colorado from 1985 to the present than from 1958–1985? \_\_\_\_\_

4. Sydney owns a pet chimpanzee. Everyday she dresses her chimpanzee in a hat, a shirt, and a pair of shorts. The chimpanzee's wardrobe consists of four hats, three shirts, and five pairs of shorts. Sydney's chimpanzee can be dressed in how many different outfits? \_\_\_\_\_

5. *Multiple Choice.* Which scenario has  $6^n$  total possible outcomes? \_\_\_\_\_

A A test with 6 questions and  $n$  choices for each

B A die with 6 sides rolled  $n$  times

C Six 6-sided dice rolled  $n$  times

6. A pizzeria offers pizzas with three crust options: thin, thick, or stuffed; and four sizes: individual, small, medium, and large. How many types of pizzas are possible? \_\_\_\_\_