NAME   DATE   PERIOD

Unit 7, Lesson 9
Practice Problems

1. Match each number to its name.

   A. 1,000,000   1. One hundredth

   B. 0.01   2. One thousandth

   C. 1,000,000,000   3. One millionth

   D. 0.000001   4. Ten thousand

   E. 0.001   5. One million

   F. 10,000   6. One billion

2. Write each expression as a multiple of a power of 10:

   a. 42,300

   b. 2,000

   c. 9,200,000

   d. Four thousand

   e. 80 million

   f. 32 billion

3. Each statement contains a quantity. Rewrite each quantity using a power of 10.

   a. There are about 37 trillion cells in an average human body.

   b. The Milky Way contains about 300 billion stars.

   c. A sharp knife is 23 millionths of a meter thick at its tip.

   d. The wall of a certain cell in the human body is 4 nanometers thick. (A nanometer is one billionth of a meter.)

NAME   DATE   PERIOD

4. A fully inflated basketball has a radius of 12 cm. Your basketball is only inflated halfway. How many more cubic centimeters of air does your ball need to fully inflate? Express your answer in terms of π. Then estimate how many cubic centimeters this is by using 3.14 to approximate π.

5. Solve each of these equations. Explain or show your reasoning.

$$2(3 - 2c) = 30 \qquad 3x - 2 = 7 - 6x \qquad 31 = 5(b - 2)$$

6. Graph the line going through $(-6, 1)$ with a slope of $\frac{-2}{3}$ and write its equation.