Division Patterns with Decimals

Complete the pattern.

1.
$$78.3 \div 1 =$$
 78.3

$$78.3 \div 10 =$$
 7.83

$$78.3 \div 100 = 0.783$$

2.
$$179 \div 10^0 =$$

$$179 \div 10^1 =$$

$$179 \div 10^2 =$$

$$179 \div 10^3 =$$

3.
$$87.5 \div 10^0 =$$

$$87.5 \div 10^1 = \underline{\hspace{1cm}}$$

$$87.5 \div 10^2 =$$

4.
$$124 \div 1 = \underline{\hspace{1cm}}$$

$$124 \div 10 =$$

$$124 \div 100 =$$

$$124 \div 1,000 =$$

$$18 \div 10 =$$

$$18 \div 100 =$$

$$18 \div 1,000 =$$

6.
$$16 \div 10^0 =$$

$$16 \div 10^1 =$$

$$16 \div 10^2 =$$

$$16 \div 10^3 =$$

$$51.8 \div 10 =$$

8.
$$49.3 \div 10^0 =$$

$$49.3 \div 10^1 =$$

$$49.3 \div 10^2 =$$

9.
$$32.4 \div 10^0 =$$

$$32.4 \div 10^1 =$$

$$32.4 \div 10^2 =$$

Problem Solving



- **10.** The local café uses 510 cups of mixed vegetables to make 1,000 quarts of beef barley soup. Each quart of soup contains the same amount of vegetables. How many cups of vegetables are in each quart of soup?
- **11.** The same café uses 18.5 cups of flour to make 100 servings of pancakes. How many cups of flour are in one serving of pancakes?

12. WRITE Math Explain how to use a pattern to find $35.6 \div 10^2$.

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Lesson Check (5.NBT.A.2)

- 1. The Statue of Liberty is 305.5 feet tall from the foundation of its pedestal to the top of its torch. Isla is building a model of the statue. The model will be one-hundredth times as tall as the actual statue. How tall will the model be?
- **2.** Sue's teacher asked her to find $42.6 \div 10^2$. How many places and in what direction should Sue move the decimal point to get the correct quotient?

Spiral Review (5.NBT.A.1, 5.NBT.B.6, 5.NBT.B.7)

- **3.** In the number 956,783,529, how does the value of the digit 5 in the ten millions place compare to the digit 5 in the hundreds place?
- **4.** Taylor has \$97.23 in her checking account. She uses her debit card to spend \$29.74 and then deposits \$118.08 into her account. What is Taylor's new balance?

- **5.** At the bank, Brent exchanges \$50 in bills for 50 one-dollar coins. The total mass of the coins is 405 grams. Estimate the mass of 1 one-dollar coin.
- **6.** A commercial jetliner has 245 passenger seats. The seats are arranged in 49 equal rows. How many seats are in each row?