## **Answers**

## **Delicious Decimals**

## Expanded Form Practice

When you write a decimal in its expanded form, pay attention to place value! Multiply each digit by its place value and write them in an addition expression.

**Example:** 53.572

$$(5 \times 10) + (3 \times 1) + (5 \times \frac{1}{10}) + (7 \times \frac{1}{100}) + (2 \times \frac{1}{1000}) = 53.572$$

Directions: Write each decimal in expanded form.

1. 749.173 = 
$$(7 \times 100) + (4 \times 10) + (9 \times 1) + (1 \times \frac{1}{10}) + (7 \times \frac{1}{100}) + (3 \times \frac{1}{1000})$$

2. 32.846 = 
$$(3 \times 10) + (2 \times 1) + (8 \times \frac{1}{10}) + (4 \times \frac{1}{100}) + (6 \times \frac{1}{1000})$$

3. 839.21 = 
$$(8 \times 100) + (3 \times 10) + (9 \times 1) + (2 \times \frac{1}{10}) + (1 \times \frac{1}{100})$$

4. 
$$436.834 = (4 \times 100) + (3 \times 10) + (6 \times 1) + (8 \times \frac{1}{10}) + (3 \times \frac{1}{100}) + (4 \times \frac{1}{1000})$$

5. 2.948 = 
$$(2 \times 1) + (9 \times \frac{1}{10}) + (4 \times \frac{1}{100}) + (8 \times \frac{1}{1000})$$

When you write expanded form as a decimal, pay attention to place value! Then, multiply each digit by its place value and add them together.

Example: 
$$(5 \times 10) + (3 \times 1) + (5 \times \frac{1}{10}) + (7 \times \frac{1}{100}) + (2 \times \frac{1}{1000})$$
  
53.572

Directions: Write each expanded form as a decimal.

1. 
$$(6 \times 10) + (8 \times \frac{1}{10}) + (3 \times \frac{1}{100}) + (9 \times \frac{1}{1000}) = \underline{60.839}$$

2. 
$$(3 \times 100) + (6 \times 10) + (7 \times 1) + (6 \times \frac{1}{10}) + (1 \times \frac{1}{100}) + (8 \times \frac{1}{1000}) = 367.618$$

3. 
$$(1 \times 100) + (9 \times 10) + (6 \times 1) + (8 \times \frac{1}{10}) + (8 \times \frac{1}{100}) = \underline{196.88}$$

4. 
$$(9 \times 100) + (7 \times 10) + (5 \times 1) + (3 \times \frac{1}{10}) + (8 \times \frac{1}{100}) + (5 \times \frac{1}{1000}) = 975.385$$

5. 
$$(7 \times 100) + (6 \times 1) + (4 \times \frac{1}{10}) + (7 \times \frac{1}{100}) + (3 \times \frac{1}{1000}) = \frac{706.473}{1000}$$