Pre-Algebra Workbook

Decimals

krista king MATH

PLACE VALUE

- 1. Identify the place value of the 4 in 12.8746.

- 2. Identify the place value of the 2 in $4{,}562.387$.

- 3. Identify the place value of the 0 in 307.119.

- 4. What is the number in the hundredths place of 80.471?

- 5. What is the number in the ten-thousandths place of $6{,}520.0019$?

- 6. What is the number in the tenths place of 0.89104?

- 7. Does “smaller” or “larger” complete the statement?

  The further you move to the right of the decimal point, the _____ the value gets.

8. Does “smaller” or “larger” complete the statement?

The further you move to the left of the decimal point, the _____ the value gets.

DECIMAL ARITHMETIC

1. Find the sum.

$4.5 + 3.75$

2. Find the difference.

$7.87 - 4.9876$

3. Find the product.

$1.5 \cdot 8.8$

4. Find the quotient.

$5.65 \div 0.02$

REPEATING DECIMALS

1. A finite decimal number is a number that _____.

2. Rewrite 0.888888 as a repeating decimal.

3. Rewrite 0.1818181818 as a repeating decimal.

4. Rewrite 1.333333333 as a repeating decimal.

5. What is the next digit in $3.\overline{142857}$?

6. What is the next digit in $0.41\overline{6}$?

7. What is the next digit in $0.\overline{81}$?

8. Name an example of a decimal number that does not end, but does not repeat.

ROUNDING

1. Complete the statement.

   If a number is less than _____, you round down.

2. Complete the statement.

   If a number is _____ or greater, you round up.

3. Round 0.7865 to the nearest hundredth.

4. Round 11.451 to the nearest tenth.

5. Round 691.014 to the tens place.

6. Round $11.\overline{6}$ to the nearest thousandth.

7. Round $44.\overline{18}$ to the nearest tenth.

■ 8. Round $15.\overline{8}$ to five decimal places.

■ 9. Complete the statement.

When you round a number to the tenths place, look at the digit in the _____ place in order to determine which way to round the number.

■ 10. Complete the statement.

When you round a number to the thousandths place, look at the digit in the _____ place in order to determine which way to round the number.

■ 11. Judith types $2 \div 3$ into the calculator and gets the answer 0.666666666667. Judith tells her friend Andy that this is not a repeating decimal because there is a 7 at the end. Andy disagrees and says the calculator rounds the number and that is why there is a 7. Who is correct? Why?

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