

Pre-Algebra Workbook

Decimals



PLACE VALUE

- 1. Identify the place value of the 2 in 4,562.387.
- 2. Identify the place value of the 0 in 307.119.
- \blacksquare 3. What is the number in the ten-thousandths place of 6,520.0019?
- 4. What is the number in the tenths place of 0.89104?
- 6. The further we move to the left of the decimal point, the ________(smaller or larger?) 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.

$$5.65 \div 0.02$$

■ 5. Simplify the expression.

$$2.5783 + 5.789 - 3.25$$

■ 6. Simplify the expression.





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.

 \blacksquare 4. What is the next digit in $3.\overline{142857}$?

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

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



ROUNDING

■ 1. If a number is _____ or greater, we round up.

■ 2. Round 11.451 to the nearest tenth.

■ 3. Round 691.014 to the tens place.

 \blacksquare 4. Round $11.\overline{6}$ to the nearest thousandth.

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

■ 6. Judith types $2 \div 3$ into the calculator and gets the answer 0.66666666667. 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?



