

| Basic Algebra                         | Scope and Sequence   |
|---------------------------------------|--|
| Unit Lesson                           | Objectives   |
| <b>Understanding Ratios and Rates</b> |  |
| Describing Part-to-Part Relationships |  |
|                                       | Describe ratio relationships between two quantities using informal language.         |
|                                       | Use models to represent relationships between quantities.                            |
|                                       | Analyze how a change in a quantity affects a part-to-part relationship.              |
| Using Ratio Notation                  |  |
|                                       | Use the notation of ratio language to describe relationships between two quantities. |
| Patterns in the Multiplication Table  |  |
|                                       | Identify equivalent ratios in the multiplication table.                              |
|                                       | Analyze patterns of equivalent ratios in the multiplication table.                   |
| Equivalent Ratios in Measurement      |  |
|                                       | Identify equivalent ratios in measurements.  |
|                                       | Analyze patterns of equivalent ratios in measurement.                                |
| Understanding Unit Rates              |  |
|                                       | Find unit rates.   |
| Unit Test                             |  |
| <b>Applying Ratios and Rates</b>      |  |
| Measurements in the Customary System  |  |
|                                       | Convert units of measurement in the customary system.                                |
|                                       | Solve real-world problems by converting customary measurement units.                 |
| Measurements in the Metric System     |  |
|                                       | Convert units of measurement in the metric system.                                   |

**Basic Algebra****Scope and Sequence****Unit Lesson****Objectives**

Solve real-world problems by converting metric measurement units.

Understanding Speed

Find speed given distance and time.

Convert measures of speed within a system.

Solving Speed Problems

Find time given distance and speed.

Find distance given time and speed.

Compare speeds.

Unit Pricing

Find unit prices.

Solve unit rate problems involving unit pricing.

Other Rate Problems

Find unit rates.

Solve real-world problems using unit rates.

Unit Test

**Variables and Expressions**

Expressions with Unknowns

Read and write algebraic expressions.

Use algebraic expressions to model real-world situations involving addition.

Use algebraic expressions to model real-world situations involving subtraction.

Expressions to Represent Multiplication  
and Division Problems

Use algebraic expressions to model real-world situations involving multiplication.

**Basic Algebra****Scope and Sequence****Unit Lesson****Objectives**

Use algebraic expressions to model real-world situations involving division.

Writing and Evaluating Expressions

Write algebraic expressions containing one operation.

Evaluate algebraic expressions containing one operation.

Expressions with More Than One Operation

Write algebraic expressions containing more than one operation.

Use the order of operations to evaluate algebraic expressions containing more than one operation.

Equivalent Expressions

Generate equivalent expressions using the commutative and associative properties.

Use substitution to determine if two expressions are equivalent.

Equivalent Expressions and the Distributive Property

Generate equivalent expressions using the distributive property.

Use substitution to determine if two expressions are equivalent.

Determining Equivalent Expressions

Determine whether two expressions are equivalent.

Explain why two expressions are equivalent or not equivalent.

Unit Test

**Variables and Equations**

Finding Unknown Numbers

Use informal reasoning to solve for unknown quantities.

Writing Equations to Find Unknowns

| Basic Algebra          |   | Scope and Sequence  |
|------------------------|---|---|
| Unit                   | Lesson  | Objectives  |
|                        |   | Differentiate between expressions and equations.  |
|                        |   | Translate simple word problems into one-step equations.   |
|                        |   | Use substitution to determine whether a given number is a solution of a one-step equation.  |
|                        | Solving One-Step Equations: Addition and Subtraction    | Write and solve one-step addition equations.  |
|                        |   | Write and solve one-step subtraction equations.   |
|                        | Solving One-Step Equations: Multiplication and Division | Write and solve one-step multiplication equations.  |
|                        |   | Write and solve one-step division equations.  |
|                        | Modeling Real-World Problems with One-Step Equations    | Write and solve one-step variable equations modeling real-world contexts involving addition, subtraction, multiplication, and division of nonnegative rational numbers. |
|                        | Modeling Relationships Between Real-World Quantities    | Use a table to determine the proportional relationship between two real-world quantities.   |
|                        |   | Analyze a table to determine its correspondence to a real-world situation.  |
|                        | Relating Relationships Shown in Tables to Equations     | Analyze the relationship between dependent and independent variables.   |
|                        |   | Write an equation to represent two quantities in a real-world situation.  |
|                        | Unit Test   |   |
| <b>Cumulative Exam</b> |   |   |

**Unit Lesson****Objectives**

Cumulative Exam Review

Cumulative Exam