

Numbers and Operations

check off all
completed
lessons

- Identifying, Comparing, and Ordering Whole Numbers Through Billions
- Adding, Subtracting, Multiplying, and Dividing Whole Numbers
- Using Powers and Exponents in Expressions
- Order of Operations

Mathematical Reasoning

check off all
completed
lessons

- Using Four-Step Plan for Problem Solving
- Solving Real-Life Problems by Using Guess-and-Check and Working Backwards
- Solving Problems Using Logical Reasoning Skills
- Using Rounding to Estimate
- Estimating Products and Quotients Using Patterns
- Determining Reasonableness of Answers and Appropriate Method of Computation

Algebraic Expressions and Equations

check off all
completed
lessons

- Writing Simple Algebraic Expressions from Phrases
- Evaluating Expressions for Given Variables
- Solving One-Step Equations Using a Box
- Solving One-Step Equations of Whole Numbers Using Addition and Subtraction
- Solving One-Step Equations of Whole Numbers Using Multiplication and Division
- Solving One-Step Equations of Whole Numbers Using All Operations
- Solving Problems Using an Equation
- Solving Two-Step Equations
- Solving Equations by Combining Like Terms

Integers

check off all
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lessons

- Reading and Writing Integers
- Comparing and Ordering Integers
- Finding Opposite and Absolute Values of Integers
- Modeling Integer Arithmetic Using Cups and Counters
- Adding Integers with Like Signs
- Adding Integers with Unlike Signs
- Subtracting Integers with Unlike Signs
- Multiplying Integers with Like and Unlike Signs
- Dividing Integers with Like and Unlike Signs
- Adding, Subtracting, Multiplying, and Dividing Integers
- Solving One-Step Equations with Integers Using all Four Operations
- Solving and Graphing Linear Inequalities on a Number Line

Decimals

- Identifying the Place Value of Decimals Through Thousandths
- Comparing and Ordering Decimals
- Rounding Decimals and Estimating Computations Using Decimals
- Adding and Subtracting Decimals
- Multiplying Decimals
- Multiplying Decimals by Powers of Ten
- Dividing Decimals (an Introduction)
- Modeling Multiplication and Division of Decimals
- Rounding Quotients Involving Decimals
- Solving One-Step Equations with Decimals Using All Four Operations
- Converting Between Standard and Scientific Notation

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Number Sense

- Using Divisibility Rules
- Identifying Prime and Composite Numbers
- Using Prime Factorization
- Finding the Greatest Common Factor
- Finding Least Common Multiple of Two or More Numbers

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Fractions

- Reducing Fractions to Lowest Terms/Simplest Form
- Converting Fractions and Decimals
- Comparing and Ordering Fractions and Decimals
- Converting Improper Fractions and Mixed Numbers
- Modeling Multiplication and Division of Fractions
- Adding and Subtracting Fractions
- Adding and Subtracting Mixed Numbers with Unlike Denominators
- Multiplying Fractions and Mixed Numbers and Simplifying
- Dividing Fractions and Mixed Numbers and Simplifying
- Estimating Computations with Fractions and Mixed Numbers
- Solving One-Step Equations with Fractions Using Addition and Subtraction
- Solving One-Step Equations with Fractions Using Multiplication and Division

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Ratios and Proportions

- Expressing Ratios as Fractions and Determining Equivalency
- Unit rates
- Solving Proportions
- Solving Problems Using Proportions, Scale Drawings, Models, and Maps

check off all
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lessons

Percents

check off all
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lessons

- Converting Fractions, Decimals, and Percents I
- Converting Fractions, Decimals, and Percents II
- Finding Number Given Percent and Total
- Finding Percent Given Number and Total
- Finding Total Given Number and Percent
- Solving Problems Using Percent
- Finding Percent Increase and Decrease
- Solving Real-World Problems Involving Sales Tax
- Solving Real-World Problems Involving Discounts
- Solving Real-World Problems Involving Simple Interest
- Solving Real-World Problems Involving Percent

Square Roots

check off all
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- Finding Square Roots of Perfect Squares
- Estimating Square Roots
- Solving Problems Using the Pythagorean Theorem
- Classifying Numbers in the Real Number System

Measurement

check off all
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lessons

- Developing a Sense of Relative Sizes of Measures
- Distinguishing Between Exact and Approximate Answers
- Converting Units in Customary System
- Converting Metric Units of Length, Capacity, and Mass
- Converting Units Between Metric and Customary System
- Calculating with Precision, Accuracy, and Significant Digits

Basic Geometry

check off all
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lessons

- Classifying Angles
- Identifying and Applying Supplementary and Complementary Angles
- Determining the Measure of Angles Made by Parallel Lines and a Transversal
- Identifying Polygons
- Classifying Triangles and Quadrilaterals
- Identifying Similar and Congruent Polygons Using Proportions
- Determining Which Figures Tessellate

Two-Dimensional Geometry

check off all
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- Finding the Perimeter of a Figure
- Finding the Area of Rectangles and Parallelograms
- Finding the Area of Triangles and Trapezoids
- Finding the Circumference of a Circle
- Finding the Area of a Circle
- Finding the Area of Irregular Figures

Three-Dimensional Geometry

check off all
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- Identifying 3-D Figures
- Identifying a Solid Figure From a Net
- Constructing Three-Dimensional Figures and Examining Their Dimensions
- Finding the Surface Area of Rectangular Prisms
- Finding the Surface Area of Cylinders
- Finding the Volume of Rectangular Prisms
- Finding the Volume of Cylinders
- Finding the Volumes of Prisms, Cylinders, Pyramids, and Cones Using Models
- Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids

Probability

check off all
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lessons

- Using Tree Diagrams
- Finding the Number of Combinations of a Set of Objects
- Finding the Probability of Simple Real-Life Events
- Constructing Sample Spaces for Compound Events (Dependent and Independent)
- Finding the Probability of Compound Events Through Experimentation
- Finding the Odds of Events and Experimental Probability from a Math Model

Statistics

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- Find the Mean, Median, and Mode
- Reading and Interpreting Bar, Line, and Circle Graphs
- Choosing Appropriate Scales and Intervals for Data (an Introduction)
- Interpreting and Constructing Line Plots
- Constructing Stem-and-Leaf Plots
- Constructing Box-and-Whisker Plots
- Interpreting and Creating Histograms
- Interpreting and Creating Scatterplots
- Making Predictions from Graphs and Choosing the Correct Graph
- Recognizing Misleading Statistics and Graphs

Patterns and Functions

- Recognizing Patterns
- Solving Problems Using a Formula
- Formulating a Possible Problem Situation Given an Equation
- Graphing Points on a Coordinate Plane
- Graphing Equations by Plotting Points
- Distinguishing Between Relations and Functions
- Graphing Translations and Reflections on the Coordinate Plane
- Applying Dilations in the Coordinate Plane
- Modeling Integer Arithmetic Using Algebra Tiles

*check off all
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