

MATHEMATICS

Course Description

4

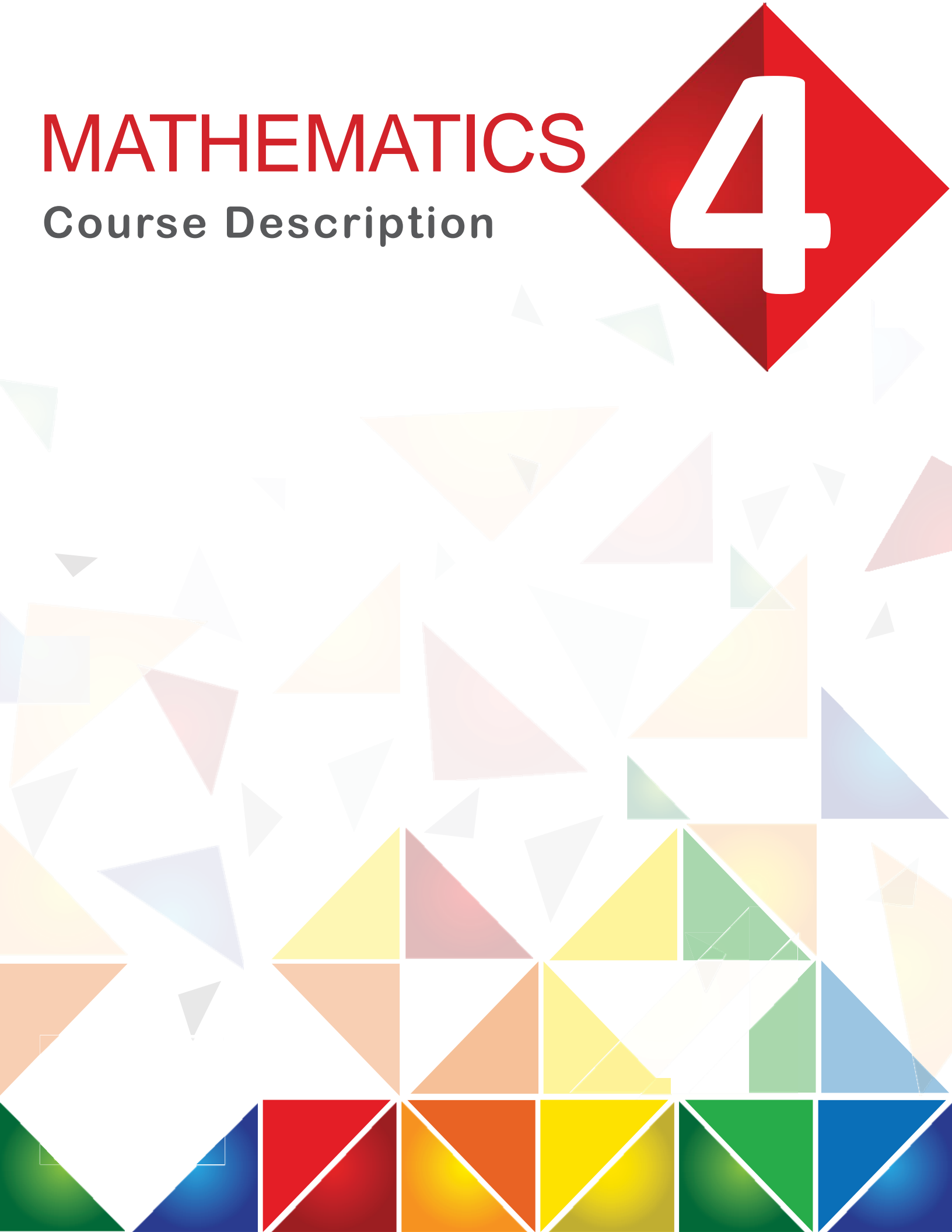


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Series Description

The objective of the EduSystem **Mathematics K-6** series is to help students develop skills and mathematical concepts in accordance with the standards set forth by the Department of Education of Puerto Rico and the National Council of Teachers of Mathematics. The purpose of the series is to create awareness of why studying mathematical processes is important and how it is necessary for solving problems that relate to real-life situations.

Through its content, strategies, and techniques, the EduSystem **Mathematics K-6** series instills a deep understanding of the concepts, skills, and techniques necessary for the subsequent study of higher mathematics and applications. The way in which the topics, examples, and recommended applications are presented allows students to visualize, understand, and value the usefulness of mathematics in everyday life.

The EduSystem **Mathematics K-6** series covers the following areas and topics: number sense, counting, and cardinal numbers; operations and algebraic thought; numbers and operations in base ten; numbers and operations with fractions and ratios; proportional relationships; numeral systems; expressions and equations; measurement and data; statistics and probability, and geometry.

In each lesson, the objectives have been carefully aligned by taking into consideration the concepts and skills students need to establish connections between the different topics. The instructional focus is based upon conceptual understanding, skills development, and mathematical problems/solutions. It also focuses on the development of critical thinking skills which is the integral means of foundation for the students.

The EduSystem **Mathematics K-6** series encourages the direct application of what students learn and how they visualize the importance of mathematics as a universal discipline relating to society, community, organizations, and institutions. Furthermore, the incorporation of situations and real-life problems in each of the topics aims to awaken an interest in the study of mathematics for students.

Concept Development

The EduSystem **Mathematics K-6** series is directed toward developing a mastery of:

- ▶ Mathematical reasoning skills and their applications.
- ▶ Application of problem-solving processes and strategies.
- ▶ Use of technology as tools to access, analyze, and apply information in the solution of problems in their immediate surroundings.

General Objectives

The objectives of this Series are to:

- ▶ Help students develop an interest and appreciation for mathematics.
- ▶ Develop mathematical capability within students through experiences that stimulate their curiosity and focus it toward investigation, problem solving, and communication.
- ▶ Promote that the students visualize mathematics as an integral whole and not as a group of isolated topics.
- ▶ Develop the problem-solving processes in students, as a cornerstone of encouragement, furthering the development of mathematical capacity.
- ▶ Stimulate within students the need of using language and academic vocabulary to communicate mathematical ideas.
- ▶ Develop mathematical reasoning and critical thinking skills that allow students to visualize mathematics as a relevant discipline in their lives.
- ▶ Emphasize the concepts of numbers, operations, and calculations so that they are correctly defined, conceived, and adequately applied.
- ▶ Promote the learning of concepts in geometry and measurement through hands-on experiences that incorporate experimentation and discovery of mathematical relationships using solid objects or manipulatives.

Course Structure

The Mathematics 4 course is composed of twelve units. Each unit is composed of lessons. Each lesson contains a presentation divided into sections that develop their individual topics. Each lesson also contains a descriptive log, activities, worksheets, and handouts related to the content and, as in most cases, website links and resources. The practice and review documents generally include word problems, as well as a section devoted solely to solving problems.

We invite you to get to know the presentation sections and the documents that are generally found in the course lessons.

The units are made up of the following:

Lessons

Each unit is composed of several lessons which are divided by topics. Furthermore, each lesson is comprised of the following:

Presentation

Each presentation is composed of the following sections:

Unit Opening

Each unit begins with an image which starts off the first lesson of the unit. This section presents the unit's theme as well as several questions in which the image or theme are explored.

Unit Opening

Place Value
Whales look like fish but they are actually mammals. They are warm blooded but they are born, they live, and reproduce in water. They are the largest animal in the world. A whale can weigh around 362,000 pounds.

How many hundred thousands are there in the whale's weight?

Introduction

Example 1

Adam's parents are planning to go on vacation. The expenses for the trip, including lodging, food, and entertainment for five people for one week, are one thousand two hundred and sixty-five dollars, with taxes.

How do we represent this quantity numerically?

Introduction

Presentation of a situation and questions to be explored.

Topics to Be Developed

Sections of concept development, where mathematical ideas and concepts are explained. On some occasions, skills are developed from the situation presented in the introduction and other examples are offered.

The amount of money that Adam's family will spend can be numerically represented as:

1, 2 6 5

ones:	5 ones = 5
tens:	6 tens = 60
hundreds:	2 hundreds = 200
thousands:	1 thousands = 1,000



Practice

Practice

Lesson closure in which students apply what they learned through some exercise.

Think About It

A reasoning question is presented and identified with a lightbulb. The goal is to develop students' reasoning and analysis capacities.



Think About It

Handouts and Worksheets



Think and Practice

Think and Practice

It presents exercises and problems after every concept development section. It has activities that help practice, enrich, and reinforce the concepts learned throughout the lesson.

Homework

Practice for each concept building section. Students are provided with a reasonable number of exercises so that they can master the skills and concepts studied in the lesson.



Homework

Lesson 0

This lesson is composed of a series of unit documents and of formative and cumulative evaluation that can be used before, during, or after the study of each unit.

What I Know!

A pretest of the concepts and skills to be discussed within the unit.



What I Know!



Connection

Connection

Activity that initiates the unit. It relates Mathematics with other fields of study.

Problem Solving

It explains strategies and procedures for the development of problem-solving skills.



Problem Solving



Unit Review

Unit review

Practice exercises that allow students to confirm what they have learned in the unit.

Reviewing the Units

Practice exercises that allow the student to confirm what they have learned in previous units.



Reviewing the Units



What I Learned

What I Learned

The skills and concepts learned in the unit are measured. It allows students to do a self-evaluation. The teacher may use it as a test.

Knowing Technology

It presents technology in its different manifestations, including the computer as well as all the gadgets present in our daily lives. It can be found in some units.



Knowing Technology



Think

Think

It presents activities and includes mathematical reasoning exercises. It can be found in some units.

Unit Breakdown

Below is an itemization of the division of each unit in lessons, including the name of each lesson with its corresponding objectives, skills, and keywords

Unit I. Place Value

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ digits
- ▶ expanded form
- ▶ ordinal numbers
- ▶ periods
- ▶ rounding

Lesson 0: Place Value

Code: C319G04U01L00

Unit Documents

- ▶ Unit Documents

Lesson 1: The Thousands Period

Code: C319G04U01L01

Objectives

- ▶ Identify the value of each digit in a number.
- ▶ Understand the value of each digit in a number.
- ▶ Recognize the place value of a number up to nine digits.
- ▶ Write a number in expanded notation.

Keywords

- ▶ expanded notation, place value, thousands, thousands period

Lesson 2: Round to the nearest thousand

Code: C319G04U01L02

Objectives

- ▶ Round whole numbers to the nearest thousand.

Keywords

- ▶ Rounding, unit of thousands

Lesson 3: The Millions Period

Code: C319G04U01L03

Objectives

- ▶ Indicate the value of a digit according to the place a number occupies in a number.

Keywords

- ▶ expanded notation, period, period of millions, place value

Lesson 4: Ordinal Numbers

Code: C319G04U01L04

Objectives

- ▶ Uses ordinal number to establish a sequence.
- ▶ Recognizes ordinal number up to one hundred.

Keywords

- ▶ ordinal numbers, first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, twelfth, thirteenth, fourteenth, fifteenth, sixteenth, seventeenth, eighteenth, nineteenth, twenty first, twenty second, thirtieth

Lesson 5: Numeral Systems

Code: C319G04U01L05

Objectives

- ▶ Recognize different numeral systems.

Keywords

- ▶ numeral systems

Lesson 6: Recognizing the Value of Coins and Bills

Code: C319G04U01L06

Objectives

- ▶ Recognize the different denominations of coins and bills in our monetary system.
- ▶ Recognize the value of coins and bills.

Keywords

- ▶ bills, coins, value

Unit 2. Adding and Subtracting Four-Digit Numbers

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ Commutative Property of Addition
- ▶ Associative Property of Addition
- ▶ Identity Property of Addition
- ▶ Zero Property of Addition

Lesson 0: Adding and Subtracting Four-Digit Numbers

Code: C319G04U02L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Properties and Operations with Numbers

Code: C319G04U02L01

Objectives

- ▶ Recognize the properties and operations in addition.

Keywords

- ▶ properties of addition

Lesson 2: Adding Four-Digit Numbers

Code: C319G04U02L02

Objectives

- ▶ Add four-digit numbers.

Keywords

- ▶ adding, place value

Lesson 3: Estimating Four-Digit Numbers

Code: C319G04U02L03

Objectives

- ▶ • Estimate four-digit sums using rounding rules.

Keywords

- ▶ estimating, rounding, sum

Lesson 4: Strategies for Estimating Subtractions

Code: C319G04U02L04

Objectives

- ▶ Use strategies to estimate subtractions by applying rounding rules.

Keywords

- ▶ estimating, rounding

Lesson 5: Subtracting Four-Digit Numbers

Code: C319G04U02L05

Objectives

- ▶ Subtract four-digit numbers regrouping and without regrouping.
- ▶ Use addition to check the answer of the subtraction.

Keywords

- ▶ regrouping, subtracting, verifying the answer

Lesson 6: Estimating Sums and Differences of Money

Code: C319G04U02L06

Objectives

- ▶ Estimate amounts of money.
- ▶ Add money estimations.
- ▶ Subtract money estimations.

Keywords

- ▶ adding sums of money, estimating sums of money, subtracting sums of money

Unit 3. Multiplication

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ Associative Property of Multiplication
- ▶ Commutative Property of Multiplication
- ▶ Factors
- ▶ Identity Property of Multiplication
- ▶ Multiples
- ▶ Multiplication
- ▶ Product
- ▶ Zero Property of Multiplication

Lesson 0: Multiplication

Code: C319G04U03L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Multiplying by 2 and 3

Code: C319G04U03L01

Objectives

- ▶ Identify the multiplication process as a repeated addition.
- ▶ Multiply by 2 and 3.

Keywords

- ▶ factors, multiplication, multiplying by 2, multiplying by 3, product

Lesson 2: Multiplying by 4 and 5

Code: C319G04U03L02

Objectives

- ▶ Identify the multiplication process as a repeated addition.
- ▶ Multiply by 4 and 5.

Keywords

- ▶ multiplication, multiplying by 4, multiplying by 5

Lesson 3: Multiplying by 6 and 7

Code: C3I9G04U03L03

Objectives

- ▶ Find multiples using numeric patterns.
- ▶ Learn to multiply by 6 and 7 through the use of numeric patterns.

Keywords

- ▶ multiples, multiplying by 6, multiplying by 7

Lesson 4: Multiplying by 8 and 9

Code: C3I9G04U03L04

Objectives

- ▶ Find multiples using numeric patterns.
- ▶ Learn to multiply by 8 and 9 through the use of numeric patterns.

Keywords

- ▶ multiples, multiplying by 8, multiplying by 9

Lesson 5: Properties of Multiplication

Code: C3I9G04U03L05

Objectives

- ▶ Recognize and apply the multiplication properties in order to solve problems.

Keywords

- ▶ multiplication, properties of multiplication

Lesson 6: Multiplication Tables

Code: C3I9G04U03L06

Objectives

- ▶ Find multiples by using numeric patterns in a times table.

Keywords

- ▶ multiples, times tables

Lesson 7: Factors and multiples

Code: C3I9G04U03L07

Objectives

- ▶ Find the factors of a given number.
- ▶ Determine if a number is prime or composite.

Keywords

- ▶ Compound, factors, prime, multiples

Unit 4. Let's Divide

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ dividend
- ▶ division
- ▶ divisor
- ▶ fact families
- ▶ quotient

Lesson 0: Division

Code: C319G04U04L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Dividing by 2 and 3

Code: C319G04U04L01

Objectives

- ▶ Identify positions and vocabulary in the division process.
- ▶ Relate division as a repeated subtraction.
- ▶ Divide by 2 and 3.

Keywords

- ▶ by, dividend, divisor, quotient

Lesson 2: Dividing by 4 and 5

Code: C319G04U04L02

Objectives

- ▶ Identify positions and vocabulary in the division process.
- ▶ Use multiples to identify the quotient.
- ▶ Divide by 4 and 5.

Keywords

- ▶ by, dividend, divisor, quotient

Lesson 3: Dividing by 6 and 7

Code: C319G04U04L03

Objectives

- ▶ Use fact families to solve divisions by 6 and 7.

Keywords

- ▶ division

Lesson 4: Dividing by 8 and 9

Code: C319G04U04L04

Objectives

- ▶ Use fact families to solve divisions by 8 and 9.

Keywords

- ▶ division

Lesson 5: Basic Fact Families

Code: C319G04U04L05

Objectives

- ▶ Form basic fact families.

Keywords

- ▶ Division, operation family

Lesson 6: Dividing by 0 and 1

Code: C319G04U04L06

Objectives

- ▶ Relate the processes of both multiplication and division.
- ▶ Form basic fact families.
- ▶ Use fact families to solve divisions by 0 and 1.

Keywords

- ▶ dividing by 0, dividing by 1, division, fact family, rule

Unit 5. Geometry

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ acute
- ▶ angle
- ▶ area
- ▶ circle
- ▶ congruent
- ▶ line
- ▶ obtuse
- ▶ parallel lines
- ▶ perpendicular lines
- ▶ perimeter
- ▶ plane
- ▶ point
- ▶ polygon
- ▶ ray
- ▶ similar

Lesson 0: Geometry

Code: C319G04U05L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Points, Lines, and Planes

Code: C319G04U05L01

Objectives

- ▶ Identify basic geometric concepts.
- ▶ Identify the point, line, plane, angle, and vertex.

Keywords

- ▶ angle, line, plane, point, vertex

Lesson 2: Classifying Angles

Code: C319G04U05L02

Objectives

- ▶ Identify the parts of an angle.
- ▶ Identify the measurement that indicates the type of angle shown.
- ▶ Classify an angle according to its measure.

Keywords

- ▶ acute, angle, obtuse, right, straight

Lesson 3: Parallel and Perpendicular Lines

Code: C3I9G04U05L03

Objectives

- ▶ Identifies and classifies lines that are parallel, perpendicular, or neither.

Keywords

- ▶ intersection, parallel, perpendicular

Lesson 4: Polygons

Code: C3I9G04U05L04

Objectives

- ▶ Classify polygons according to the number of sides.
- ▶ Recognize polygons.
- ▶ Recognize the characteristics of the different polygons.

Keywords

- ▶ polygon, quadrilateral, rectangle, segment, square, trapezium, triangle

Lesson 5: Congruent and Similar Figures

Code: C3I9G04U05L05

Objectives

- ▶ Classify and identify similar and congruent figures.

Keywords

- ▶ congruent, similar

Lesson 6: Area and Perimeter

Code: C3I9G04U05L06

Objectives

- ▶ Understand the area and perimeter concepts.
- ▶ Determine the area and perimeter of a figure.
- ▶ Determine the area and perimeter of irregular figures.

Keywords

- ▶ area, perimeter

Lesson 7: Parts of a Circle

Code: C3I9G04U05L07

Objectives

- ▶ Identify a circle.
- ▶ Establish the difference between circle and circumference.

- ▶ Identify the segments inside a circumference.

Keywords

- ▶ center, chord, circle, circumference, diameter, radius

Lesson 8: Three-Dimensional Figures

Code: C319G04U05L08

Objectives

- ▶ Identify two-dimensional figures.
- ▶ Identify three-dimensional figures.
- ▶ Classify three-dimensional figures.
- ▶ Identify the surroundings of a three-dimensional figure.

Keywords

- ▶ cone, cube, cylinder, prism, pyramid, three-dimensional figures, sphere

Unit 6. Time and Graphs

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ calendar
- ▶ data table
- ▶ frequency
- ▶ line graph
- ▶ pictograph

Lesson 0: Time and Graphs

Code: C319G04U06L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Minutes and Hours

Code: C319G04U06L01

Objectives

- ▶ Read and express the time on the clock in different ways.

Keywords

- ▶ analog clock, digital clock, half an hour, quarter of an hour

Lesson 2: Using AM and PM Abbreviations

Code: C319G04U06L02

Objectives

- ▶ Identify the AM and PM abbreviations.

Keywords

- ▶ AM, PM

Lesson 3: Estimating Time

Code: C319G04U06L03

Objectives

- ▶ Estimate time.

Keywords

- ▶ approximate, estimate, time

Lesson 4: Time Elapsed

Code: C319G04U06L04

Objectives

- ▶ Determine the time elapsed from the beginning to the end of an event.

Keywords

- ▶ time elapsed

Lesson 5: The Calendar

Code: C319G04U06L05

Objectives

- ▶ Identify the parts of a calendar.
- ▶ Understand the use of a calendar.
- ▶ Recognize the months with different amounts of days.
- ▶ Use a calendar to count time elapsed between dates.

Keywords

- ▶ calendar, leap year, month, week, year

Unit 7. Multiplying by Two-Digit Numbers

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ digits
- ▶ multiples
- ▶ multiplication
- ▶ product

Lesson 0: Multiplying by Two-Digit Numbers

Code: C319G04U07L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Multiplying by Multiples of 10

Code: C319G04U07L01

Objectives

- ▶ Multiply by multiples of 10.

Keywords

- ▶ multiples, multiply, 10

Lesson 2: Multiplying Three and Four-Digit Numbers

Code: C319G04U07L02

Objectives

- ▶ Multiply by three and four-digit numbers.

Keywords

- ▶ four digits, multiply, three digits

Lesson 3: Multiplying by Two-Digit Numbers

Code: C319G04U07L03

Objectives

- ▶ Multiply by two-digit numbers.

Keywords

- ▶ multiply, two digits

Lesson 4: Estimating Products of Numbers and Amounts of Money

Code: C319G04U07L04

Objectives

- ▶ Estimate products of both numbers and amounts of money.

Keywords

- ▶ estimate, money, product

Unit 8. Dividing Two and Three-Digit Numbers

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ dividend
- ▶ division
- ▶ divisor
- ▶ quotient
- ▶ remainder

Lesson 0: Dividing Two and Three-Digit Numbers

Code: C319G04U08L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Dividing Multiples of 10

Code: C319G04U08L01

Objectives

- ▶ Divide by multiples of 10.

Keywords

- ▶ division, multiples, quotient

Lesson 2: Dividing Three-Digit Numbers

Code: C319G04U08L02

Objectives

- ▶ Divide three-digit numbers.

Keywords

- ▶ division, multiples, quotient

Lesson 3: Dividing Three-Digit Numbers with Remainders

Code: C319G04U08L03

Objectives

- ▶ Divide three-digit numbers with remainders.

Keywords

- ▶ dividend, division, quotient, remainder

Lesson 4: Dividing by Two-Digit Numbers

Code: C319G04U08L04

Objectives

- ▶ Divide by two-digit numbers.

Keywords

- ▶ dividend, division, quotient, remainder

Lesson 5: Estimating Quotients

Code: C319G04U08L05

Objectives

- ▶ Estimate quotients.

Keywords

- ▶ quotient

Unit 9. Measurement

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ capacity
- ▶ English System
- ▶ fraction of an inch
- ▶ gram
- ▶ inch
- ▶ liter
- ▶ mass
- ▶ meter
- ▶ metric system
- ▶ ounce
- ▶ pound
- ▶ volume

Lesson 0: Measurement

Code: C319G04U09L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Units of Length in the Customary and Metric Systems

Code: C319G04U09L01

Objectives

- ▶ Identify the units of length in the metric system.
- ▶ Identify the units of length in the English system.

Keywords

- ▶ customary system, inch, meter, metric system

Lesson 2: Units of Capacity in the Customary and Metric Systems

Code: C319G04U09L02

Objectives

- ▶ Identify the units of capacity in the metric system.
- ▶ Identify the units of capacity in the customary system.

Keywords

- ▶ liter, ounce

Lesson 3: Units of Mass in the Customary and Metric Systems

Code: C319G04U09L03

Objectives

- ▶ Identify the units of mass in the metric system.
- ▶ Identify the units of mass in the customary system.

Keywords

- ▶ gram, kilogram, liter, mass, ton

Lesson 4: Units of Length to the Fraction of an Inch

Code: C319G04U09L04

Objectives

- ▶ Measure objects or small spaces using fractions of an inch.

Keywords

- ▶ $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, inch

Lesson 5: From one unit to another

Code: C319G04U09L05

Objectives

- ▶ Will perform conversions from one unit to another.

Keywords

- ▶ conversions, length, units, capacity units, mass units

Lesson 6: The Volume of Objects

Code: C319G04U09L06

Objectives

- ▶ Find the volume of an object or a specific space.

Keywords

- ▶ volume

Unit 10. Fractions

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ denominator
- ▶ equivalent fractions
- ▶ fourth
- ▶ fractions
- ▶ half
- ▶ improper fractions
- ▶ like fractions
- ▶ numerator
- ▶ proper fractions
- ▶ simplify
- ▶ sixth
- ▶ third

Lesson 0: Fractions

Code: C319G04U10L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Parts of a Whole: Halves and Fourths

Code: C319G04U10L01

Objectives

- ▶ Write a fraction the way it is read.
- ▶ Identify the numerator and denominator in a fraction.

Keywords

- ▶ denominator, fourth, fractions, half, numerator

Lesson 2: Parts of a Whole: Thirds and Sixths

Code: C319G04U10L02

Objectives

- ▶ Write a fraction the way it is read.
- ▶ Identify the numerator and denominator of a fraction.

Keywords

- ▶ denominator, fractions, numerator, sixths, third

Lesson 3: A Fraction of a Group

Code: C319G04U10L03

Objectives

- ▶ Identify a fraction of a group.

Keywords

- ▶ denominator, fractional part, numerator

Lesson 4: Equivalent Fractions

Code: C319G04U10L04

Objectives

- ▶ Identify equivalent fractions.

Keywords

- ▶ divide, equivalent fractions, multiply

Lesson 5: Simplifying Fractions

Code: C319G04U10L05

Objectives

- ▶ Simplify fractions.

Keywords

- ▶ common factors, denominator, factors, nominator, simplify

Lesson 6: Comparing Fractions

Code: C319G04U10L06

Objectives

- ▶ Compare fractions.

Keywords

- ▶ compare fractions

Lesson 7: Adding and Subtracting Like Fractions

Code: C319G04U10L07

Objectives

- ▶ Add and subtract like fractions.
- ▶ Decomposes fractions to add.
- ▶ Solve word problems involving addition and subtraction of fractions.

Keywords

- ▶ add, like fractions, subtract

Lesson 8: Add and subtract mixed numbers

Code: C319G04U10L08

Objectives

- ▶ Add and subtract mixed numbers with the same denominator.

Keywords

- ▶ denominator, numerator, mixed numbers, subtraction, addition

Lesson 9: Proper and Improper Fractions

Code: C319G04U10L09

Objectives

- ▶ Identify fractions as proper or improper.
- ▶ Change improper fractions to mixed numbers.

Keywords

- ▶ like fractions, subtraction, addition

Unit 1 I. Patterns and equations

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ addition
- ▶ multiplication
- ▶ unknown value
- ▶ division
- ▶ number patterns
- ▶ equations
- ▶ patterns
- ▶ geometric patterns
- ▶ subtraction

Lesson 0: Patterns and equations

Code: C319G04U11L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Number and geometric patterns

Code: C319G04U11L01

Objectives

- ▶ Recognizes number and geometric patterns.
- ▶ Continues a given pattern.

Keywords

- ▶ patterns, number patterns, geometric patterns.

Lesson 2: One-step addition and subtraction equations

Code: C319G04U11L02

Objectives

- ▶ Uses symbols to represent an unknown value.
- ▶ Determines the order to solve expressions.
- ▶ Solve addition and subtraction equations.

Keywords

- ▶ equations, subtraction, addition, unknown value

Lesson 3: One-Step multiplication and division equations

Code: C319G04U11L03

Objectives

- ▶ Uses symbols to represent an unknown value.
- ▶ Determines the order to solve expressions.
- ▶ Solve multiplication and division equations.

Keywords

- ▶ division, equations, multiplication, unknown value

Unit 12. Probability And Statistics

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ certain
- ▶ event
- ▶ probability
- ▶ probable
- ▶ dot plot
- ▶ circle graph
- ▶ bar graph
- ▶ unlikely
- ▶ experiment
- ▶ sample space
- ▶ prediction
- ▶ line graph
- ▶ pictograph
- ▶ frequency
- ▶ survey
- ▶ gathering data
- ▶ mode
- ▶ median
- ▶ mean
- ▶ average

Lesson 0: Probability And Statistics

Code: C319G04U12L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Probability That an Event Will Occur

Code: C319G04U12L01

Objectives

- ▶ Describe an event as certain, probable or unlikely

Keywords

- ▶ certain, event, probability, probable, unlikely

Lesson 2: Sample Space

Code: C319G04U12L02

Objectives

- ▶ Identify the sample space of an experiment.

Keywords

- ▶ experiment, sample space

Lesson 3: Proving Predictions

Code: C3I9G04U12L03

Objectives

- ▶ Confirm predictions.

Keywords

- ▶ prediction

Lesson 4: Gathering Data

Code: C3I9G04U12L04

Objectives

- ▶ Identifies the concept and importance of a survey.
- ▶ Organize the data obtained from a survey using check marks.
- ▶ Interpret the data obtained from a survey.

Keywords

- ▶ frequency, gathering data, survey, tally mark

Lesson 5: Mode and Median in a Data Set

Code: C3I9G04U12L05

Objectives

- ▶ Find the mode and the median of a set of data.

Keywords

- ▶ mean, median, mode

Lesson 6: Finding the Average in a Data Set

Code: C3I9G04U12L06

Objectives

- ▶ Find the average of a set of data.

Keywords

- ▶ arithmetic mean, average, data

Lesson 7: Data and graphs

Code: C3I9G04U12L07

Objectives

- ▶ Interpret data using graphs.
- ▶ Recognizes the different types of graphs.
- ▶ Choose the most appropriate graph.

Keywords

- ▶ dot plot, circle graph, bar graph, line graph, graphs

Lesson 8: Making Pictographs

Code: C319G04U12L08

Objectives

- ▶ Recognizes the concept of pictogram.
- ▶ Uses the pictogram to organize the data obtained.
- ▶ Interprets the pictogram with the use of a key.
- ▶ Draws conclusion using the information organized in the pictogram.
- ▶ Construct a pictogram

Keywords

- ▶ graph, pictograph

Lesson 9: Ordered Pairs

Code: C319G04U12L09

Objectives

- ▶ Represent and locate ordered pairs in a graph.
- ▶ Represents geometric figures in the first quadrant.

Keywords

- ▶ graph, ordered pair

Lesson 10: Line Graphs

Code: C319G04U12L10

Objectives

- ▶ Make a line graph.
- ▶ Defines the concept of linear graph to represent the data obtained.
- ▶ Interpret a line graph.
- ▶ Draw conclusions using the line graph.

Keywords

- ▶ line graph

Unit 13. Decimals

At the end of this unit, the student will achieve the objectives found in the following lessons.

Unit Concepts

- ▶ decimals
- ▶ tenth
- ▶ hundredths
- ▶ numbers
- ▶ thousandths
- ▶ estimating
- ▶ rounding
- ▶ comparing
- ▶ subtract
- ▶ sum
- ▶ equivalence
- ▶ fractions

Lesson 0: Decimals

Code: C319G04U13L00

Unit Documents

- ▶ Unit Documents

Lesson 1: Tenths

Code: C319G04U13L01

Objectives

- ▶ Recognize the tenths.
- ▶ Write a decimal in its standard and word forms.

Keywords

- ▶ decimals, tenth

Lesson 2: Hundredths

Code: C319G04U13L02

Objectives

- ▶ Recognize the hundredths.
- ▶ Write a decimal in its standard and word forms.

Keywords

- ▶ decimals, hundredths, numbers

Lesson 3: Thousandths

Code: C3I9G04U13L03

Objectives

- ▶ Recognize the thousandths.
- ▶ Write a decimal in its standard and word forms.

Keywords

- ▶ thousandths

Lesson 4: Estimating and Rounding Decimals

Code: C3I9G04U13L04

Objectives

- ▶ Estimate and round decimals.

Keywords

- ▶ decimals, estimating, rounding

Lesson 5: Comparing Decimal Numbers

Code: C3I9G04U13L05

Objectives

- ▶ Compare decimal numbers.

Keywords

- ▶ comparing

Lesson 6: Adding and Subtracting Decimal Numbers

Code: C3I9G04U13L06

Objectives

- ▶ Add and subtract decimal numbers.

Keywords

- ▶ subtract, sum

Lesson 7: Fractions and Decimals

Code: C3I9G04U13L07

Objectives

- ▶ Write fractions as decimals.
- ▶ Write decimals as fractions
- ▶ Recognizes the equivalence between fractions and decimals.

Keywords

- ▶ compare, decimals, equivalence, fractions