

The Correlation of PLATO® instructional curricula to California Academic Content Standards (CACCS)

Mathematics

Grade 3–5

April 13, 2005

PLATO Learning Correlation to the California Academic Content Standards

INTRODUCTION

PLATO Learning, Inc. combines PLATO® computer-assisted instruction into a flexible, integrated learning system to enhance instructional effectiveness in education programs. This document identifies PLATO® instructional activities that correlate to the California Academic Content Standards, Mathematics.

It is recommended that instructors review the correlation in order to fine-tune the activity to fit their educational environment. Modules may be added or removed; web sites and offline activities may also be incorporated to enhance the learning path.

The following PLATO® courseware was used in this alignment:

- **PLATO® Math Expeditions D**
- **PLATO® Math Expeditions E**
- **PLATO® Math Expeditions F**

PLATO Learning, Inc. looks forward to supporting your initiatives in providing successful educational programs using PLATO® computer-based lessons.

Grade 3

Number Sense

1.0 Students understand place value of whole numbers.

1.1 Count, read, and write whole numbers to 10,000.

PLATO Math Expeditions D

- Numeration D - Compare
- Compare numbers to 999
- Compare numbers to
- Numeration D - Order
- Order numbers to 999

- Order numbers to 9999
- Numeration D - Place Value
- Write standard form to 999
- Write standard form to 9999
- Write standard form to 999,999

1.2 Compare and order whole numbers to 10,000.

PLATO Math Expeditions D

- Numeration D - Compare
- Compare numbers to 999
- Compare numbers to 9999
- Numeration D - Order
- Order numbers to 999

- Order numbers to 9999
- Math Expeditions E**
- Numeration E - Compare
- Compare numbers to 999,
- Numeration E - Order
- Order numbers to 999,999

1.3 Identify the place value for each digit in numbers to 10,000.

PLATO Math Expeditions E

- Numeration E - Place Value
- Identify place value to millions

1.4 Round off numbers to 10,000 to the nearest ten, hundred and thousand.

PLATO Math Expeditions D

- Numeration D - Round
- Round numbers to tens
- Round to tens and hundreds

PLATO Math Expeditions E

- Numeration E - Round
- Round numbers to 999,999

1.5 Use expanded notation to represent numbers (e.g., $3,206 = 3,000 + 200 + 6$).

PLATO Math Expeditions D

- Numeration D - Place Value
- Write standard form to 999
- Write standard form to 9999

- Write standard form to 999,999
- PLATO Math Expeditions E**
- Numeration E - Place Value
- Identify place value to millions

2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division.

2.1 Find the sum or difference of two whole numbers between 0 and 10,000.

PLATO Math Expeditions D

- Number Operations D - Addition
- Add two numbers with sums to 18
- Add two 2-digit numbers
- Add two 2, 3, or 4-digit numbers
- Number Operations D - Subtraction
- Subtract numbers 13 to 18
- Subtract 1D from multiples of 10
- Subtract 2D from multiples of 10
- Subtract two 2-digit numbers

- Subtract 3-digit numbers
- Subtract 4-digit numbers
- PLATO Math Expeditions E**
- Number Operations E - Addition
- Add two or more numbers
- Number Operations E - Subtraction
- Subtract numbers 13-18
- Subtract 2 or 3-digit numbers
- Subtract 4 of 5-digit numbers

2.2 Memorize to automaticity the multiplication table for numbers between 1 and 10.

PLATO Math Expeditions D

- Number Operations D - Multiplication
- Multiply with zero through five
- Multiply with fives and sixes
- Multiply with sevens and eights
- Multiply with nines

- PLATO Math Expeditions E**
- Number Operations E - Multiplication
- Multiply with zero through five
- Multiply with fives and sixes
- Multiply with sevens and eights
- Multiply with nines

2.3 Use the inverse relationship of multiplication and division to compute and check results.

PLATO Math Expeditions E

- Number Operations E - Division
- Divide by 1-9 with remainders

2.4 Solve simple problems involving multiplication of multi-digit numbers by one-digit numbers ($3,671 \times 3 = \underline{\quad}$).

PLATO Math Expeditions E

- Number Operations E - Multiplication
- Multiply 2-digit by 2-digit numbers
- Multiply 3-digit by 2-digit numbers

2.5 Solve division problems in which a multi-digit number is evenly divided by a one-digit number ($135/5 = \underline{\quad}$).

PLATO Math Expeditions E

- Number Operations E - Division
- Divide by 2-digit with remainders A
- Divide by 2 digit with remainders B

2.6 Understand the special properties of 0 and 1 in multiplication and division.

PLATO Math Expeditions D

- Number Operations D - Multiplication
- Multiply with zero through five

PLATO Math Expeditions E

- Number Operations E - Subtraction
- Subtract numbers 13-18
- Number Operations E - Multiplication
- Multiply with zero through five

2.8 Solve problems that require two or more of the skills mentioned above.

PLATO Math Expeditions E

- Number Operations E - Addition
- Use mental math to add
- Number Operations E - Division
- Divide by 1-9 with remainders

3.0 Students understand the relationship between whole numbers, simple fractions, and decimals.

3.1 Compare fractions represented by drawings or concrete materials to show equivalency and to add and subtract fractions in context (e.g., $1/2$ of a pizza is the same amount as $2/4$ of another pizza that is the same size; show that $3/8$ is larger than $1/4$.)

PLATO Math Expeditions D

- Fractions D - Fractions
- Add and subtract fractions
- Equivalent fractions

PLATO Math Expeditions E

- Fractions E - Fractions
- Equivalent fractions & lowest terms
- Add & subtract same fractions
- Compare equivalent fractions
- Add & subtract different fractions

3.2 Add and subtract simple fractions (e.g., determine that $1/8 + 3/8$ is the same as $1/2$).

PLATO Math Expeditions D

- Fractions D - Fractions
- Add and subtract fractions

PLATO Math Expeditions E

- Fractions E - Fractions
- Add & subtract same fractions

3.3 Solve problems involving addition, subtraction, multiplication, and division of money amounts in decimal notation and multiply and divide money amounts in decimal notation by using whole-number multipliers and divisors.

PLATO Math Expeditions D

- Number Operations D - Addition
- Add money
- Number Operations D - Subtraction
- Subtract with money
- Number Operations D - Multiplication
- Multiply with money

PLATO Math Expeditions E

- Number Operations E - Multiplication
- Multiply using money
- Number Operations E - Division
- Dividing money

3.4 Know and understand that fractions and decimals are two different representations of the same concept (e.g., 50 cents is 1/2 of a dollar, 75 cents is 3/4 of a dollar).

PLATO Math Expeditions D

- Fractions D - Fractions
- Equivalent fractions

PLATO Math Expeditions E

- Fractions E - Fractions
- Equivalent fractions & lowest terms
- Compare equivalent fractions

Algebra and Functions

1.0 Students select appropriate symbols, operations and properties to represent, describe, simplify, and solve simple number relationships.

1.5 Recognize and use the commutative and associative properties of multiplication (e.g., if $5 \times 7 = 35$, then what is 7×5 ?, if $5 \times 7 \times 3 = 105$, then what is $7 \times 3 \times 5$?).

PLATO Math Expeditions D

- Number Operations D - Addition
- Add three or more 1-digit numbers
- Number Operations D - Multiplication
- Multiply with zero through five
- Multiply with fives and sixes
- Multiply with sevens and eights

- Multiply with nines

PLATO Math Expeditions E

- Number Operations E - Multiplication
- Multiply with zero through five
- Multiply with fives and sixes
- Multiply with sevens and eights
- Multiply with nines

Measurement and Geometry

1.0 Students choose and use appropriate units and measurement tools to quantify the properties of objects.

1.1 Choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects.

PLATO Math Expeditions D

- Measurement D - Length
- Identify units of length

PLATO Math Expeditions E

- Measurement E - Length
- Metric units of length
- Measurement E - Capacity
- Metric units capacity, mass, temperature

1.3 Find the perimeter of a polygon with integer sides.

PLATO Math Expeditions D

- Geometry D - Geometry
- Determine perimeter of a polygon

PLATO Math Expeditions E

- Geometry E - Geometry
- Find the perimeter

2.0 Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

2.1 Identify, describe, and classify polygons (including pentagons, hexagons, and octagons).

PLATO Math Expeditions E

- Geometry E - Geometry
- Identify geometric shapes

2.2 Identify attributes of triangles (e.g., two equal sides for the isosceles triangle, three equal sides for the equilateral triangle, right angle for the right triangle).

PLATO Math Expeditions E

- Geometry E - Geometry
- Identify geometric shapes

2.3 Identify attributes of quadrilaterals (e.g., parallel sides for the parallelogram, right angles for the rectangle, equal sides and right angles for the square).

PLATO Math Expeditions E

- Geometry E - Geometry
- Identify geometric shapes

2.4 Identify right angles in geometric figures or in appropriate objects and determine whether other angles are greater or less than a right angle.

PLATO Math Expeditions E

- Geometry E - Geometry
- Classify points, lines & angles

Grade 4

Number Sense

1.0 Students understand place value of whole numbers and decimals to two decimal places, how these relate to simple fractions, and use concepts of negative numbers.

1.1 Read and write whole numbers in the millions.

PLATO Math Expeditions D

- Numeration D - Compare
- Compare numbers to 999
- Compare numbers to 9999
- Numeration D - Order
- Order numbers to 999
- Order numbers to 9999
- Numeration D - Place Value
- Write standard form to 999
- Write standard form to 9999
- Write standard form to 999,999

PLATO Math Expeditions E

- Numeration E - Compare
- Compare numbers to 999,999
- Numeration E - Place Value
- Identify place value to millions

PLATO Math Expeditions F

- Numeration F - Compare
- Compare numbers to 999,999
- Numeration F - Order
- Order numbers to 999,999
- Numeration F - Place Value
- Identify place value to millions

1.2 Order and compare whole numbers and decimals to two decimal places.

PLATO Math Expeditions D

- Numeration D - Compare
 - Compare numbers to 999
 - Compare numbers to 9999
- Numeration D - Order
 - Order numbers to 999
 - Order numbers to 9999
- Numeration D - Place Value
 - Write standard form to 999
 - Write standard form to 9999
 - Write standard form to 999,999

PLATO Math Expeditions E

- Numeration E - Compare
 - Compare numbers to 999,999
- Numeration E - Order
 - Order numbers to 999,999

- Numeration E - Place Value
 - Identify place value to millions
- Decimals E - Decimals
 - Write decimals
 - Compare, order & round decimals

PLATO Math Expeditions F

- Numeration F - Compare
 - Compare numbers to 999,999
- Numeration F - Order
 - Order numbers to 999,999
- Numeration F - Place Value
 - Identify place value to millions
- Decimals F - Decimals
 - Compare, order & round decimals

1.3 Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand.

PLATO Math Expeditions D

- Numeration D - Round
 - Round numbers to tens
 - Round to tens and hundreds

PLATO Math Expeditions E

- Numeration E - Round
 - Round numbers to 999,999

PLATO Math Expeditions F

- Numeration F - Round
 - Round through millions

1.5 Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalents of fractions (see Standard 4.0).

PLATO Math Expeditions D

- Fractions D - Fractions
 - Equivalent fractions

PLATO Math Expeditions F

- Ratio/Proportion F - Ratio/Proportion
 - Write ratios

PLATO Math Expeditions E

- Fractions E - Fractions
 - Equivalent fractions & lowest terms
 - Compare equivalent fractions

1.6 Write tenths and hundredths in decimal and fraction notation and know the fraction and decimal equivalents for halves and fourths (e.g., $1/2 = 0.5$ or $.50$; $7/4 = 1\ 3/4 = 1.75$).

PLATO Math Expeditions D

- Fractions D - Fractions
 - Equivalent fractions

PLATO Math Expeditions E

- Fractions E - Fractions
 - Equivalent fractions & lowest terms
 - Compare equivalent fractions

- Decimals E - Decimals
 - Write decimals

PLATO Math Expeditions F

- Decimals F - Decimals
 - Compare, order & round decimals
- Ratio/Proportion F - Ratio/Proportion
 - Decimals & fractions as %
 - Write ratios

1.7 Write the fraction represented by a drawing of parts of a figure; represent a given fraction by using drawings; and relate a fraction to a simple decimal on a number line.

PLATO Math Expeditions D

- Fractions D - Fractions
 - Equivalent fractions

PLATO Math Expeditions F

- Ratio/Proportion F - Ratio/Proportion
 - Decimals & fractions as %

2.0 Students extend their use and understanding of whole numbers to the addition and subtraction of simple decimals.

2.1 Estimate and compute the sum or difference of whole numbers and positive decimals to two places.

PLATO Math Expeditions D

- Number Operations D - Addition
 - Add two numbers with sums to 18
 - Add three 1-digit numbers to 18
 - Add 2-digit plus 1-digit numbers
 - Add two 2-digit numbers
 - Estimate sums
 - Add three or more 1-digit numbers
 - Add three or more 2-digit numbers
 - Add two 2, 3, or 4-digit numbers
- Number Operations D - Subtraction
 - Subtract numbers 13 to 18
 - Subtract 1D from multiples of 10
 - Subtract 2D from multiples of 10
 - Subtract two 2-digit numbers
 - Estimate differences
 - Subtract 3-digit numbers
 - Subtract 4-digit numbers
- Decimals D - Decimals
 - Add and subtract decimals
- Money D - Money
 - Solve problems

PLATO Math Expeditions E

- Number Operations E - Addition
 - Use mental math to add
 - Estimate sums
 - Add two or more numbers
- Number Operations E - Subtraction
 - Subtract numbers 13-18
 - Estimate differences
 - Subtract 2 or 3-digit numbers
 - Subtract 4 of 5-digit numbers
- Decimals E - Decimals
 - Add & subtract decimals

PLATO Math Expeditions F

- Number Operations F - Addition
 - Add two or more numbers
 - Estimate sums
 - Add large numbers
- Number Operations F - Subtraction
 - Estimate differences
 - Subtract numbers up to 6-digits
 - Subtract numbers with zeros
- Decimals F - Decimals
 - Add & subtract decimals

2.2 Round two-place decimals to one decimal or the nearest whole number and judge the reasonableness of the rounded answer.

PLATO Math Expeditions E

- Decimals E - Decimals
 - Compare, order & round decimals

PLATO Math Expeditions F

- Decimals F - Decimals

3.0 Students solve problems involving addition, subtraction, multiplication, and division of whole numbers and understand the relationships among the operations.

3.1 Demonstrate an understanding of, and the ability to use, standard algorithms for addition and subtraction of multi-digit numbers.

PLATO Math Expeditions D

- Number Operations D - Addition
 - Add two 2-digit numbers
 - Add two 2, 3, or 4-digit numbers
- Number Operations D - Subtraction
 - Subtract 2D from multiples of 10
 - Subtract two 2-digit numbers
 - Subtract 3-digit numbers
 - Subtract 4-digit numbers

PLATO Math Expeditions E

- Number Operations E - Addition
 - Add two or more numbers

- Number Operations E - Subtraction
 - Subtract 2 or 3-digit numbers
 - Subtract 4 of 5-digit numbers

PLATO Math Expeditions F

- Number Operations F - Addition
 - Add two or more numbers
 - Add large numbers
- Number Operations F - Subtraction
 - Subtract numbers up to 6-digits
 - Subtract numbers with zeros

3.2 Demonstrate an understanding of standard algorithms for multiplying a multi-digit number by a 2-digit number and for dividing a multi-digit number by a 1-digit number; use relationships between them to simplify computations and to check results.

PLATO Math Expeditions D

- Number Operations D - Multiplication
- Multiply with zero through five
- Number Operations D - Division
- Divide by 2-5
- Divide by 6-9
- Divide by 1-digit, with remainders
- Divide by 1-digit numbers
- Divide 3-digit by 1-digit numbers

PLATO Math Expeditions E

- Number Operations E - Multiplication
- Multiply 2-digit by 2-digit numbers
- Multiply 3-digit by 2-digit numbers
- Number Operations E - Division
- Divide by 1-9 with remainders

- Divide 2-digit by 1-digit with remainders
- Divide 3-digit by 1-digit with remainders A
- Divide 3-digit by 1 digit with remainders B

PLATO Math Expeditions F

- Number Operations F - Multiplication
- Multiply 2-digit by 2-digit numbers
- Multiply 3-digit by 2-digits
- Multiply by 3-digit numbers
- Number Operations F - Division
- Divide 2-digit by 1-digit with remainders
- Divide 3-digit by 1 digit with remainders A
- Divide 3-digit by 1-digit with remainders B
- Divide 3-digit and 4-digit by 1-digit with 0

3.3 Solve problems involving multiplication of multi-digit numbers by two-digit numbers.

PLATO Math Expeditions E

- Number Operations E - Multiplication
- Multiply 2-digit by 2-digit numbers
- Multiply 3-digit by 2-digit numbers

PLATO Math Expeditions F

- Number Operations F - Multiplication
- Multiply 2-digit by 2-digit numbers
- Multiply 3-digit by 2-digits
- Multiply by 3-digit numbers

3.4 Solve problems involving division of multi-digit numbers by one-digit numbers.

PLATO Math Expeditions D

- Number Operations D - Division
- Divide by 1-digit, with remainders
- Divide by 1-digit numbers
- Divide 3-digit by 1-digit numbers

PLATO Math Expeditions E

- Number Operations E - Division
- Divide by 1-9 with remainders
- Divide 2-digit by 1-digit with remainders
- Divide 3-digit by 1-digit with remainders A
- Divide 3-digit by 1 digit with remainders B

- Divide by 2-digit with remainders A
- Divide by 2 digit with remainders B

PLATO Math Expeditions F

- Number Operations F - Division
- Divide 2-digit by 1-digit with remainders
- Divide 3-digit by 1 digit with remainders A
- Divide 3-digit by 1-digit with remainders B
- Divide 3-digit and 4-digit by 1-digit with 0
- Divide by 2-digits with remainders
- Divide 3-digit and 4-digit by 2-digit A
- Divide 3-digit and 4-digit by 2-digit B

Measurement and Geometry

1.0 Students understand perimeter and area.

1.1 Measure the area of rectangular shapes by using appropriate units, square centimeter, square meter, square kilometer, square inches, square yard, square mile.

PLATO Math Expeditions D

- Geometry D - Geometry
- Polygon area by counting squares

PLATO Math Expeditions E

- Geometry E - Geometry
- Find the area

PLATO Math Expeditions F

- Geometry F - Geometry

1.2 Recognize that rectangles that have the same area can have different perimeters.

PLATO Math Expeditions D

- Geometry D - Geometry
- Determine perimeter of a polygon
- Polygon area by counting squares

PLATO Math Expeditions E

- Geometry E - Geometry
- Find the area

PLATO Math Expeditions F

- Geometry F - Geometry

1.3 Understand that rectangles that have the same perimeter can have different areas.

PLATO Math Expeditions D

- Geometry D - Geometry
- Determine perimeter of a polygon
- Polygon area by counting squares

PLATO Math Expeditions E

- Geometry E - Geometry
- Find the area

PLATO Math Expeditions F

- Geometry F - Geometry

1.4 Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use these formulas to find the areas of more complex figures by dividing the figures into basic shapes.

PLATO Math Expeditions D

- Geometry D - Geometry
- Determine perimeter of a polygon

PLATO Math Expeditions E

- Geometry E - Geometry
- Find the perimeter

PLATO Math Expeditions F

- Geometry F - Geometry
- Find the area

3.0 Students demonstrate an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.

3.1 Identify lines that are parallel and perpendicular.

PLATO Math Expeditions E

- Geometry E - Geometry
- Classify points, lines & angles

PLATO Math Expeditions F

- Geometry F - Geometry

3.2 Identify the radius and diameter of a circle.

PLATO Math Expeditions F

- Geometry F - Geometry
- Find the circumference

3.3 Identify congruent figures.

PLATO Math Expeditions F

- Geometry F - Geometry
- Identify congruent & similar

3.5 Know the definitions of a right angle, an acute angle, and an obtuse angle. Understand that 90° , 180° , 270° , and 360° are associated, respectively, with $1/4$, $1/2$, $3/4$ and full turns

PLATO Math Expeditions E

- Geometry E - Geometry
- Classify points, lines & angles

PLATO Math Expeditions F

- Geometry F - Geometry
- Measure angles

3.7 Know the definitions of different triangles (e.g., equilateral, isosceles, scalene) and identify their attributes.

PLATO Math Expeditions E

- Geometry E - Geometry
- Identify geometric shapes

PLATO Math Expeditions F

- Geometry F - Geometry

3.8 Know the definition of different quadrilaterals (e.g., rhombus, square, rectangle, parallelogram, trapezoid).

PLATO Math Expeditions E

- Geometry E - Geometry
- Identify geometric shapes

PLATO Math Expeditions F

- Geometry F - Geometry

1.0 Students organize, represent, and interpret numerical and categorical data and clearly communicate their findings.

1.2 Identify the mode(s) for sets of categorical data and the mode(s), median, and any apparent outliers for numerical data sets.

PLATO Math Expeditions F

- Probability F - Probability
- Range, median, mode & mean

Grade 5

Number Sense

1.0 Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers.

1.1 Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers.

PLATO Math Expeditions E

- Numeration E - Compare
- Compare numbers to 999,999
- Numeration E - Place Value
- Identify place value to millions
- Numeration E - Round
- Round numbers to 999,999
- Decimals E - Decimals
- Write decimals
- Compare, order & round decimals

PLATO Math Expeditions F

- Numeration F - Compare
- Compare numbers to 999,999
- Numeration F - Order
- Order numbers to 999,999
- Numeration F - Place Value
- Identify place value to millions
- Numeration F - Round
- Round through millions
- Decimals F - Decimals
- Compare, order & round decimals

1.2 Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number.

PLATO Math Expeditions E

- Fractions E - Fractions
- Equivalent fractions & lowest terms
- Compare equivalent fractions

PLATO Math Expeditions F

- Ratio/Proportion F - Ratio/Proportion
- Decimals & fractions as %
- Write ratios

2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results.

PLATO Math Expeditions E

- Decimals E - Decimals
- Add & subtract decimals

PLATO Math Expeditions F

- Decimals F - Decimals
- Multiply decimals

2.2 Demonstrate proficiency with division, including division with positive decimals and long division with multi-digit divisors.

PLATO Math Expeditions E

- Number Operations E - Division
- Divide by 1-9 with remainders
- Divide 2-digit by 1-digit with remainders
- Divide 3-digit by 1-digit with remainders A
- Divide 3-digit by 1 digit with remainders B
- Divide by 2-digit with remainders A
- Divide by 2 digit with remainders B

PLATO Math Expeditions F

- Number Operations F - Division
- Divide 2-digit by 1-digit with remainders

- Divide 3-digit by 1 digit with remainders A
- Divide 3-digit by 1-digit with remainders B
- Divide 3-digit and 4-digit by 1-digit with 0
- Divide 2 and 3 digit by multiples of ten
- Divide by 2-digits with remainders
- Divide 3-digit and 4-digit by 2-digit A
- Divide 3-digit and 4-digit by 2-digit B
- Decimals F - Decimals
- Divide decimals

2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in simplest form.

PLATO Math Expeditions E

- Fractions E - Fractions
- Equivalent fractions & lowest terms
- Add & subtract same fractions
- Add & subtract different fractions

PLATO Math Expeditions F

- Fractions F - Fractions
- Add & subtract same fractions
- Add & subtract different fractions
- Add mixed numbers
- Subtract mixed numbers
- Multiply fractions & mixed numbers

2.4 Understand the concept of multiplication and division of fractions.

PLATO Math Expeditions F

- Fractions F - Fractions
- Multiply fractions & mixed numbers

2.5 Compute and perform simple multiplication and division of fractions and apply these procedures to solving problems.

PLATO Math Expeditions F

- Fractions F - Fractions
- Multiply fractions & mixed numbers

Algebra and Functions

1.0 Students use variables in simple expressions, compute the value of the expression for specific values of the variable, and plot and interpret the results.

1.1 Use information taken from a graph or equation to answer questions about a problem situation.

PLATO Math Expeditions E

- Graphs E - Graphs
- Data from graphs

PLATO Math Expeditions F

- Graphs F - Graphs
- Data from graphs

1.4 Identify and graph ordered pairs in the four quadrants of the coordinate plane.

PLATO Math Expeditions F

- Geometry F - Geometry
- Locate coordinate points

Measurement and Geometry

1.0 Students understand and compute the volumes and areas of simple objects.

1.1 Derive and use the formula for the area of a right triangle and of a parallelogram by comparing it with the formula for the area of a rectangle.

PLATO Math Expeditions F

- Geometry F - Geometry
- Find the area

1.3 Understand the concept of volume and use the appropriate units in common measuring systems (i.e., cubic centimeter [cm³], cubic meter [m³], cubic inches [in³], cubic yard [yd³] to compute the volume of rectangular solids.

PLATO Math Expeditions E

- Measurement E - Length
- Metric units of length
- Measurement E - Capacity
- Metric units capacity, mass, temperature

PLATO Math Expeditions F

- Measurement F - Length
- Metric units of length
- Measurement F - Capacity
- Metric units capacity, mass, temperature
- Geometry F - Geometry
- Find the volume

1.4 Differentiate between, and use appropriate units of measures for, two- and three-dimensional objects (i.e., find the perimeter, area, volume).

PLATO Math Expeditions E

- Measurement E - Length
- Metric units of length
- Measurement E - Capacity
- Metric units capacity, mass, temperature

PLATO Math Expeditions F

- Measurement F - Length
- Metric units of length
- Measurement F - Capacity
- Metric units capacity, mass, temperature
- Geometry F - Geometry
- Find the volume

2.0 Students identify, describe, and classify properties of, and the relationships between, plane and solid geometric figures.

2.1 Measure, identify, and draw angles, perpendicular and parallel lines, rectangles, and triangles by using appropriate tools (e.g., straightedge, ruler, compass, protractor, drawing software).

PLATO Math Expeditions E

- Geometry E - Geometry
- Classify points, lines & angles

PLATO Math Expeditions F

- Geometry F - Geometry
- Measure angles

Statistics, Data Analysis, and Probability

1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes.

1.1 Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ.

PLATO Math Expeditions F

- Probability F - Probability
- Range, median, mode & mean

1.3 Use fractions and percentages to compare data sets of different size.

PLATO Math Expeditions E

- Fractions E - Fractions
- Compare equivalent fractions

1.4 Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph.

PLATO Math Expeditions F

- Geometry F - Geometry
- Locate coordinate points

1.5 Know how to write ordered pairs correctly; for example, (x, y).

PLATO Math Expeditions F

- Geometry F - Geometry
- Locate coordinate points