ALEKS®

4th Grade Arithmetic (with QuickTables)

This course covers the topics shown below. Students navigate learning paths based on their level of readiness. Institutional users may customize the scope and sequence to meet curricular needs.

Curriculum (122 topics + 17 additional topics)

- Whole Numbers (66 topics)
 - Expanded Form and Numeral Translation (6 topics)
 - Whole number place value: Problem type 1
 - Whole number place value: Problem type 2
 - Expanded form
 - Numeral translation: Problem type 1
 - Numeral translation: Problem type 2
 - Adding or subtracting 10, 100, or 1000
 - Addition and Subtraction (15 topics)
 - One-digit addition with regrouping
 - Addition of 3 or 4 one-digit numbers
 - Adding a 2-digit number and a 1-digit number with regrouping
 - Adding 2-digit numbers without regrouping
 - Adding 2-digit numbers with regrouping a ten
 - Adding with regrouping a hundred
 - Addition of large numbers
 - Finding the value of a collection of coins
 - Finding the value of a collection of bills and coins
 - Subtracting a 1-digit number from a 2-digit number
 - Subtraction of 2-digit numbers without regroupingSubtraction of 2-digit numbers with regrouping

 - Subtraction with multiple regrouping steps

 - Subtraction and regrouping with zeros
 - Word problem with addition or subtraction of whole numbers
 - Multiplication and Division (27 topics)
 - Multiplication as repeated addition
 - One-digit multiplication
 - Multiplication by 10, 100, and 1000
 - Understanding multiplication of a one-digit number with a larger number
 - Multiplying 2-digit and 1-digit numbers without regrouping
 - Multiplying with regrouping
 - Introduction to multiplication of large numbers
 - Multiplication with trailing zeros: Problem type 1
 - Multiplication with trailing zeros: Problem type 2
 - Multiplication of large numbers
 - Using multiplication to find the number of squares
 - Using addition and multiplication to count the objects on a grid
 - Multiples: Problem type 1
 - Multiples: Problem type 2
 - Division facts
 - Division without regrouping
 - Division with regrouping
 - Division with trailing zeros: Problem type 1
 - Division with trailing zeros: Problem type 2
 - Division with remainder involving quotients with intermediate zeros: Problem type 2
 - · Quotient with remainder: 1-digit divisor, 2-digit dividend
 - Word problem on quotient and remainder
 - Quotient with remainder: 1-digit divisor, 3-digit dividend
 - Quotient with remainder: 2-digit divisor, 3-digit dividend
 - Word problem with multiplication or division of whole numbers
 - Word problem with division of whole numbers and rounding: Problem type 2 Word problem with multiplication and addition or subtraction of whole numbers
 - Rounding, Estimation, and Order of Operations (13 topics)
 - Introduction to inequalities
 - Ordering large numbers
 - Rounding to tens or hundreds
 - Rounding to hundreds or thousands
 - Rounding to thousands, ten thousands, or hundred thousands
 - Estimating a sum of whole numbers: Problem type 2

- Estimating a difference of whole numbers: Problem type 2
- Estimating a product
- Estimating a quotient
- Introduction to parentheses
- Introduction to order of operations
- Order of operations with whole numbers
- Order of operations with whole numbers and grouping symbols
- Factors and Prime Numbers (5 topics)
 - Even and odd numbers
 - o Divisibility rules for 2, 5, and 10
 - Factors
 - Greatest common factor of 2 numbers
 - Least common multiple of 2 numbers
- Fractions (22 topics)
 - Equivalent Fractions (5 topics)
 - Introduction to fractions
 - Understanding equivalent fractions
 - Equivalent fractions
 - · Introduction to simplifying a fraction
 - Simplifying a fraction
 - Ordering and Plotting Fractions (5 topics)
 - Ordering fractions with the same denominator
 - Ordering fractions with the same numerator
 - Using a common denominator to order fractions
 - Fractional position on a number line
 - Plotting fractions on a number line
 - Operations with Fractions (6 topics)
 - Addition or subtraction of fractions with the same denominator
 - Addition or subtraction of unit fractions
 - Introduction to addition or subtraction of fractions with different denominators
 - · Addition or subtraction of fractions with different denominators
 - o Product of a unit fraction and a whole number
 - Product of a fraction and a whole number: Problem type 1
 - Mixed Numbers (6 topics)
 - Writing a mixed number and an improper fraction for a shaded region
 - Writing an improper fraction as a mixed number
 - Writing a mixed number as an improper fraction
 - Addition or subtraction of mixed numbers with the same denominator
 - Mixed number addition with the same denominator and renaming
 - Mixed number subtraction with the same denominator and renaming
- Decimals (17 topics)
 - Place Value and Converting (10 topics)
 - Writing a decimal and a fraction for a shaded region
 - Decimal place value: Tenths and hundredths
 - o Decimal place value: Hundreds to ten thousandths
 - Rounding decimals
 - Introduction to ordering decimals
 - Ordering decimals
 - Converting a decimal to a fraction: Basic
 - Converting a decimal to a proper fraction in simplest form: Advanced
 - o Converting a fraction with a denominator of 10, 100, or 1000 to a decimal
 - Converting a decimal to a mixed number
 - Operations with Decimals (7 topics)
 - · Addition with money
 - Addition of aligned decimals
 - Decimal addition with 3 numbers
 - Subtraction of aligned decimals
 - Subtraction with money
 - Word problem with one decimal operation: Problem type 1
 - Word problem with one decimal operation: Problem type 2
- Measurement and Geometry (17 topics)
 - Customary Measurement (4 topics)
 - U.S. Customary unit conversion with whole number values

- U.S. Customary unit conversion with whole number values: Two-step conversion
- Conversions involving measurements in feet and inches
- Adding measurements in feet and inches
- Metric Measurement (2 topics)
 - Metric distance conversion with whole number values
 - Metric mass or volume conversion with whole number values
- Time (5 topics)
 - Time unit conversion with whole number values
 - Introduction to adding time
 - Adding time
 - Introduction to elapsed time
 - Elapsed time
- Perimeter and Area (4 topics)
 - Perimeter and area on a grid
 - Perimeter of a square or a rectangle
 - Perimeter of a polygon
 - Area of a square or a rectangle
- Volume and Surface Area (2 topics)
 - Volume of a rectangular prism made of unit cubes
 - Volume of a rectangular prism
- Other Topics Available(*) (17 additional topics)
 - Whole Numbers (7 topics)
 - Expanded form with zeros
 - Divisibility rules for 3 and 9
 - Prime numbers
 - Prime factorization
 - Fact families for addition and subtraction
 - Fact families for multiplication and division
 - Finding the next terms of a sequence with whole numbers
 - Fractions (1 topics)
 - Fractional part of a circle
 - Measurement and Geometry (9 topics)
 - Measuring length to the nearest inch
 - Measuring length to the nearest quarter or half inch
 - Telling time and determining a.m. or p.m.
 - Reading a calendar
 - Interpreting a bar graph
 - o Interpreting a double bar graph
 - Interpreting a line graph
 - Finding the missing length in a figure
 - Area of a piecewise rectangular figure

*Other Topics Available By default, these topics are NOT included in the course, but can be added using the content editor in the Teacher Module.

QuickTables ALEKS QuickTables is a research-based, math fact mastery program for multiplication, division, addition, and subtraction for grades 3 and up. The online program offers ongoing assessment, learning, review, and visual tracking of student progress.