DIMENSIONU MATH CURRICULUM - ELEMENTARY GRADES

Level D

Number and Operations
Place Value
Compare Whole Numbers
Equivalent Number Forms
Fractions as Part/Whole
Fractions as Part/Group
Compare Fractions
Equivalent Fractions
Use Symbols to Compare
Multiplication
Division
Multiply/Divide
Properties of Addition
Properties of Multiplication
Multiplication Facts
Division Facts
Add/Subtract Whole Numbers
Add Even/Odd Numbers
Estimate in Problem Solving
Estimate to Check Results

Algebra
Patterns/Number Sequences
Properties of Operations
Relationships as Equations

Geometry
Describe Figures
Characteristics of Figures

Measurement
Use Units of Measure
Convert Units

Level E

Number and Operations
Place Value
Compare Numbers
Decimals as Part/Whole
Equivalent Number Forms
Equivalent Fractions
Apply Fractions
Equivalent Decimals/Fractions
Multiply/Divide
Inverse Operations
Problem-Solving Methods
Properties of Multiplication
Multiples of 10/100
Add/Subtract Numbers
Multiply Even/Odd Numbers
Multiply
Divide
Round Whole Numbers
Estimate to Check Results
Add/Subtract Fractions
Add/Subtract Decimals

Algebra
Patterns
Analyze Patterns/Functions
Properties of Operations
Equations/Inequalities

Geometry
Characteristics of Figures

Measurement
Identify Angles
Use Units of Measure
Standard Units
Calculate Elapsed Time
Convert Units
Find Area

Level F

Number and Operations
Compare Numbers
Equivalent Fractions
Improper Fractions
Find Factors
Prime/Composite Numbers
Multiply
Divide
Estimate to Check Results
Estimate with Fractions
Estimate with Decimals
Find Common Factors/GCF
Find Multiples/LCM
Add/Subtract Fractions

Algebra
Describe Patterns
Order of Operations
Variables/Equations
Translate to Algebra
Substitute for Variables
Solve Equations

Geometry
Interior Angles
Classify Figures

Measurement
Convert Measurements
Find Perimeter
Find Surface Area/Volume

Data Analysis and Probability
Find the Mean
Possible Outcomes
Likelihood of an Event
Predict Probability

Level G

Number and Operations
Fractions/Decimals/Percents
Equiv. Rational Numbers
Compare Numbers
Cross Multiplication
Find Percent/Rate
Fractions/Unlike Denominators
Mixed Numbers/Unlike Denominators
Properties of Addition
Properties of Multiplication
Inverse Operations
Estimate Percents
Estimate to Check Results

Algebra
Analyze Patterns
Use Variables in Expressions
Translate to Algebra
Solve Linear Eq.

Geometry
Classify Figures

Measurement
Measurement Systems
Equiv. Customary Units
Equiv. Metric Units
Find Area/Volume
Find Lengths w/Area/Volume
Equiv. Ratios/Proportions
Solve Proportions
Find Rates

Data Analysis and Probability
Frequency Tables
Mean/Median/Mode
Find Possible Outcomes
Find Probability

Level G

Number and Operations
Fractions/Decimals/Percents
Equiv. Rational Numbers
Compare Numbers
Cross Multiplication
Find Percent/Rate
Fractions/Unlike Denominators
Mixed Numbers/Unlike Denominators
Properties of Addition
Properties of Multiplication
Inverse Operations
Estimate Percents
Estimate to Check Results

Algebra
Analyze Patterns
Use Variables in Expressions
Translate to Algebra
Solve Linear Eq.

Geometry
Classify Figures

Measurement
Measurement Systems
Equiv. Customary Units
Equiv. Metric Units
Find Area/Volume
Find Lengths w/Area/Volume
Equiv. Ratios/Proportions
Solve Proportions
Find Rates

Data Analysis and Probability
Frequency Tables
Mean/Median/Mode
Find Possible Outcomes
Find Probability

Level H

Number and Operations
Rational/Irrational Numbers
Solve Percent Problems
Find Common Factors/GCF
Find Multiples/LCM
Find Prime Factorization
Perfect Squares
Rational Numbers
Properties of Addition
Properties of Multiplication
Inverse Relationships
Order of Operations

Algebra
Linear/Nonlinear Funct.
Represent Funct. w/Eq.
Add/Subtract Monomials
Translate to Algebra
Equivalent Alg. Expressions
Solve Multi-Step Eq.
Solve Inequalities
Solve Eq./Inequalities

Geometry
Similar Figures

Measurement
Convert Capacities
Convert Mass
Convert Unit Prices/Money
Diameter/Radius
Find Surface Area
Find Volume
Scale Factors of Length
Find Rates

Data Analysis and Probability
Find Range
Estimate Using Samples

Level I

Number and Operations
Percents <1% and >100%
Exponents of Zero/Negative Values
Square Roots

Algebra
Represent Funct. w/Eq.
Translate to Inequalities
Multiply/Divide Monomials
Add/Subtract Polynomials
Multiply Polynomials
Divide Polynomials
Solve Systems of Eq.
Linear Eq./Funct./Slope
Solve Multi-Step Inequalities

Geometry
Intercepts/Slope
Find Eq. of a Line
Distance Between Points
Angles Formed by Transversal

Measurement
Convert Equivalent Measures
Indirect Measurement

Data Analysis and Probability
Mean/Median/Range
Quartiles

Level Algebra

Number and Operations
Equiv. Real Numbers
Properties of Real Numbers
Simplify Radical Terms

Algebra
Operations w/Radical Terms
Solve Alg. Problems
Factorials/Exponents/Absolute Values
Combinations/Permutations
Undefined Fractions
Set-Builder/Interval Notation
Complement of a Subset
Intersection/Union
Domain/Range of Relations
Solve Relation/Funct. Problems
Translate to Algebra
Equiv. Eq./Inequalities
Quadratic Eq.
Exponential Growth/Decay
Multiply/Divide Monomials
Simplify Polynomial Fractions
Difference of Perfect Squares

Geometry
Find Eq. w/Points
Find Eq. w/Slope
Identify Parallel Lines
Find Slope w/Eq.
Find Sine/Cosine/Tangent

Measurement
Find Area/Perimeter
Find Volume/Surface Area
Find Rates
Convert Measurements
Relative Errors of Measurement

Data Analysis and Probability
Identify Types of Data
Measures of Central Tendency
Correlation/Causation
Conditional Probability
Probability: Event/Complement
Probability: Series of Events
Probability: Two Events