COURSE CURRICULUM MAP -- MATH 7

INTRODUCE

Mathematical skill	Conceptual Framework	Subset
Recognize and name irrational numbers	Number Sense	Number Sets
Approximate an irrational number	Number Sense	Estimation
Write and evaluate square roots	Number Sense	Computation without Calculator
Write and evaluate powers (0 and negative exponents)	Number Sense	Computation without Calculator
Recognize and use the properties to simplify a numeric or algebraic expression	Number Sense	Computation without Calculator
Graph an inequality	Patterns & Functions	Relationship
Identify and recognize linear and non-linear relationships expressed in tables and graphs	Patterns & Functions	Relationship
Solve 2-step equations and inequalities	Patterns & Functions	Relationship
Name ordered pairs that are solutions to a linear equation and plot these values	Patterns & Functions	Relationship
Develop simulations to predict on event	Probability	Chance
Recognize dependent/ independent events	Probability	Chance
Recognize and use representative samples	Probability	Data Collection
Collect a random sample from a population	Probability	Data Collection
Measure/ determine volume of other 3D figures	Measurement	Types

INTRODUCE / DEVELOP

Mathematical skill	Conceptual Framework	Subset
Identify inverses & identities for addition and multiplication	Patterns & Functions	Relationship
Solve for a variable in a formula with 1-step	Patterns & Functions	Relationship
Use the Pythagorean theorem to find the length of any side in a right triangle	Geometry	Geometry
Scatterplot a data set in two variables and estimate a line to fit the data	Statistics	Data Organization
Determine measures of variation (range, outliers of a data set) using technology as appropriate	Statistics	Data Interpretation
Determine surface area of prisms	Measurement	Types
Determine the slope of a line	Measurement	Slope

COURSE CURRICULUM MAP -- MATH 7

DEVELOP

Mathematical skill	Conceptual Framework	Subset
Recognize and name rational numbers	Number Sense	Number Sets
Write numbers in scientific notation	Number Sense	Number Sets
Properties- distributive $3 \times (2+4) = (3 \times 2) + (3 \times 4)$	Number Sense	Number Theory
Use and determine percents including those greater than 100 and less than 1	Number Sense	Relationship
Recognize angle relationships	Number Sense	Relationship
Express sequences algebraically	Patterns & Functions	Number
Given an arithmetic or geometric sequence find the nth term of the sequence	Patterns & Functions	Number
Recognize and use commutative, associative and distributive properties of addition and multiplication (numbers and variables)	Patterns & Functions	Relationship
Add and subtract to simplify polynomial expressions	Patterns & Functions	Relationship
Write linear equations and inequalities	Patterns & Functions	Relationship
Evaluate variable expressions through numerical substitution	Patterns & Functions	Relationship
Solve 1-step linear equations and inequalities	Patterns & Functions	Relationship
Graph the line representing the solution of a linear equation	Patterns & Functions	Relationship
Use logical reasoning (inductive and deductive)	Patterns & Functions	Logic
Identify and use relationships among parts of complex 2D and 3D figures (parallel sides, congruent faces, etc)	Geometry	Geometry
Analyze transformations and relate properties to similarity and congruence (translation, rotation, reflection)	Geometry	Geometry
Use ratio and proportion to determine the unknown sides of similar triangles	Geometry	Geometry
Identify and use properties of subsets of polygons	Geometry	Geometry
Use lengths and areas to determine theoretical geometric probabilities	Probability	Chance
Design various methods to gather data	Probability	Data Collection
Use model / simulations to generate data	Probability	Data Collection
Select an appropriate method of display data	Probability	Data Organization
Recognize that data can be manipulated	Probability	Data Organization
Determine the circumference of a circle	Measurement	Types
Use formula to find perimeter of common and complex figures	Measurement	Types
Determine area of circle, triangle, parallelograms, and trapezoids	Measurement	Types
Determine area of an irregular figure	Measurement	Types
Determine angle measures using angle relationships	Measurement	Types
Calculate percent of change	Measurement	Money
Classify angle pairs	Measurement	Angles

COURSE CURRICULUM MAP -- MATH 7

DEVELOP / TEST

Mathematical skill	Conceptual Framework	Subset
Recognize exponents	Number Sense	Number Sets
Identify greatest common factors	Number Sense	Number Theory
Identify least common multiple	Number Sense	Number Theory
Recognize and use ≥, ≤ and ≠	Number Sense	Relationship
Use and determine reciprocals	Number Sense	Relationship
Relate and convert fractions to percents	Number Sense	Relationship
Use ratio and proportion (rates, scale drawings & similarity)	Number Sense	Relationship
Add/subtract mixed numbers	Number Sense	Computation without Calculator
Add/subtract integers	Number Sense	Computation without Calculator
Multiply fractions	Number Sense	Computation without Calculator
Multiply integers	Number Sense	Computation without Calculator
Divide fractions	Number Sense	Computation without Calculator
Divide decimals	Number Sense	Computation without Calculator
Divide integers	Number Sense	Computation without Calculator
Write and evaluate powers (positive exponents)	Number Sense	Computation without Calculator
Apply the order of operations to problems (with & without exponents)	Number Sense	Computation without Calculator
Identify parallel, intersecting and perpendicular lines	Geometry	Geometry
Use tree diagrams, tables, and systematic listing to count outcomes, choices, and possibilities	Probability	Chance
Predict theoretical probability	Probability	Chance
Relate & compare experimental probabilities	Probability	Chance
Relate & compare theoretical probabilities	Probability	Chance
Express probability as decimals and/or percents	Probability	Numerical Representation
Determine measures of central tendency (mean, median, mode) in complex problems	Statistics	Data Interpretation
Make predictions based on analysis	Statistics	Data Interpretation
Based on data analysis, draw conclusions and develop convincing arguments	Statistics	Data Interpretation
Recognize equivalences between standard and metric measures	Measurement	Systems
Converts units within a system (quarts to cups, mm to cm)	Measurement	Systems
Measure / determine volume of rectangular prisms	Measurement	Types
Examine basic credibility of data	Statistics	Data Interpretation

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