**Arizona Mathematics Standards Grades 6-8 Curriculum Mapping** 

| Arizona Mathematics Standards | Boardworks Middle School Math Presentations |
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| **Grade 6** | |
| **Strand 1: Number and Operations, Concept 1: Number Sense** | |
| PO 1. Convert between expressions for positive rational numbers, including fractions, decimals, percents, and ratios. | Equivalent fractions, decimals and percentages<br>Equivalent fractions<br>Fractions and decimals<br>Introducing percentages<br>Ratio and rate |
| PO 2. Use prime factorization to<br>• express a whole number as a product of its prime factors and<br>• determine the greatest common factor and least common multiple of two whole numbers. | Prime factorization<br>GCF and LCM |
| PO 3. Demonstrate an understanding of fractions as rates, division of whole numbers, parts of a whole, parts of a set, and locations on a real number line. | Fractions of shapes<br>Ordering fractions<br>Finding a fraction of an amount<br>Ratio and rate<br>Dividing in a given ratio<br>Ratio and proportion problems |
| PO 4. Compare and order integers; and positive fractions, decimals, and percents. | Ordering integers<br>Ordering fractions<br>Ordering decimals<br>Introducing percentages<br>Equivalent fractions, decimals and percentages<br>Using negative numbers in context |
| PO 5. Express that a number's distance from zero on the number line is its absolute value. | Absolute value |
| PO 6. Express the inverse relationships between exponents and roots for perfect squares and cubes. | Square roots<br>Cubes and cube roots |

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| **Strand 1: Number and Operations, Concept 2: Numerical Operations** | |
| PO 1. Apply and interpret the concepts of addition and subtraction with integers using models. | Adding and subtracting integers<br>Adding and subtracting integers activities |
| PO 2. Multiply multi-digit decimals through thousandths. | Multiplying and dividing by 0.1 and 0.01<br>Multiplying by numbers between 0 and 1<br>Mental math and place value<br>Mental math puzzles<br>Mental multiplication |
| PO 3. Divide multi-digit whole numbers and decimals by decimal divisors with and without remainders. | Mental math puzzles<br>Multiplying and dividing by 0.1 and 0.01<br>Mental division |
| PO 4. Multiply and divide fractions. | Multiplying fractions<br>Dividing by fractions |
| PO 5. Provide a mathematical argument to explain operations with two or more fractions or decimals. | Adding and subtracting simple fractions<br>Methods for adding and subtracting fractions<br>Multiplying and dividing by 0.1 and 0.01<br>Multiplying by numbers between 0 and 1 |
| PO 6. Apply the commutative, associative, distributive, and identity properties to evaluate numerical expressions involving whole numbers. | Properties of numbers |
| PO 7. Simplify numerical expressions (involving fractions, decimals, and exponents) using the order of operations with or without grouping symbols. | Order of operations and PEMDAS |
| **Strand 1: Number and Operations, Concept 3: Estimation** | |
| PO 1. Use benchmarks as meaningful points of comparison for rational numbers. | - |
| PO 2. Make estimates appropriate to a given situation and verify the reasonableness of the results. | Estimation and approximation<br>Checking results |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 1: Data Analysis (Statistics)** | |
| PO 1. Solve problems by selecting, constructing, and interpreting displays of data, including histograms and stem-and-leaf plots. | Appropriate graphs<br>Histograms<br>Calculating statistics<br>Bar graphs<br>Line graphs<br>Circle graphs<br>Collecting data |

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| PO 2. Formulate and answer questions by interpreting, analyzing, and drawing inferences from displays of data, including histograms and stem-and-leaf plots. | Appropriate graphs<br>Histograms<br>Calculating statistics<br>Line graphs<br>Circle graphs<br>Bar graphs |
| PO 3. Use extreme values, mean, median, mode, and range to analyze and describe the distribution of a given data set. | Finding the mode<br>Finding the median<br>Finding the range<br>Calculating statistics<br>Calculating the mean<br>Comparing data |
| PO 4. Compare two or more sets of data by identifying trends. | Comparing data |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 2: Probability** | |
| PO 1. Use data collected from multiple trials of a single event to form a conjecture about the theoretical probability. | Experimental probability |
| PO 2. Use theoretical probability to<br>•predict experimental outcomes,<br>•compare the outcome of the experiment to the prediction, and<br>•replicate the experiment and compare results. | Probability diagrams<br>The language of probability<br>Calculating probability part 1<br>Experimental probability |
| PO 3. Determine all possible outcomes (sample space) of a given situation using a systematic approach. | Probability diagrams |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 3: Systematic Listing and Counting** | |
| PO 1. Build and explore tree diagrams where items repeat. | - |
| PO 2. Explore counting problems with Venn diagrams using three attributes. | Venn diagrams |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 4: Vertex-Edge Graphs** | |
| PO 1. Investigate properties of vertex-edge graphs<br>•Hamilton paths,<br>•Hamilton circuits, and<br>•shortest route. | - |
| PO 2. Solve problems related to Hamilton paths and circuits. | - |

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| **Strand 3: Patterns, Algebra, and Functions, Concept 1: Patterns** | |
| PO 1. Recognize, describe, create, and analyze a numerical sequence involving fractions and decimals using all four basic operations. | Introducing sequences<br>Sequences from geometrical patterns<br>Describing and continuing sequences<br>Generating sequences from flow charts<br>Generating sequences and rules |
| **Strand 3: Patterns, Algebra, and Functions, Concept 2: Functions and Relationships** | |
| PO 1. Recognize and describe a relationship between two quantities, given by a chart, table, or graph, using words and expressions. | Direct variations<br>Function machines<br>Mapping functions<br>Graphs of functions<br>The equation of a straight line |
| **Strand 3: Patterns, Algebra, and Functions, Concept 3: Algebraic Representations** | |
| PO 1. Use an algebraic expression to represent a quantity in a given context. | Writing expressions<br>Introducing formulas |
| PO 2. Create and solve two-step equations that can be solved using inverse properties with fractions and decimals. | Solving simple equations<br>Substitution<br>Dividing algebraic terms<br>Multiplying algebraic terms<br>Combining like terms |
| PO 3. Translate both ways between a verbal description and an algebraic expression or equation. | Writing expressions |
| PO 4. Evaluate an expression involving the four basic operations by substituting given fractions and decimals for the variable. | Substitution |

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| **Strand 3: Patterns, Algebra, and Functions, Concept 4: Analysis of Change** | |
| PO 1. Determine a pattern to predict missing values on a line graph or scatterplot. | Direct variations<br>Conversion graphs<br>Graphs of functions |
| **Strand 4: Geometry and Measurement, Concept 1: Geometric Properties** | |
| PO 1. Define π (pi) as the ratio between the circumference and diameter of a circle and explain the relationship among the diameter, radius, and circumference. | Circles<br>Circumference of a circle |
| PO 2. Solve problems using properties of supplementary, complementary, and vertical angles. | Calculating angles<br>Angles in polygons |
| **Strand 4: Geometry and Measurement, Concept 2: Transformation of Shapes** | |
| PO 1. Identify a simple translation or reflection and model its effect on a 2-dimensional figure on a coordinate plane using all four quadrants. | Translation<br>Reflection |
| PO 2. Draw a reflection of a polygon in the coordinate plane using a horizontal or vertical line of reflection. | Reflection |
| **Strand 4: Geometry and Measurement, Concept 3: Coordinate Geometry** | |
| PO 1. Graph ordered pairs in any quadrant of the coordinate plane. | Introducing coordinates<br>Reading and plotting graphs |
| PO 2. State the missing coordinate of a given figure on the coordinate plane using geometric properties to justify the solution. | Quadrilaterals on a coordinate grid |
| **Strand 4: Geometry and Measurement, Concept 4: Measurement** | |
| PO 1. Determine the appropriate unit of measure for a given context and the appropriate tool to measure to the needed precision (including length, capacity, angles, time, and mass). | Measuring angles<br>Customary unit conversions<br>Converting metric units<br>Estimating measurements |
| PO 2. Solve problems involving conversion within the U.S. Customary and within the metric system. | Customary unit conversions<br>Converting metric units |
| PO 3. Estimate the measure of objects using a scale drawing or map. | Scale drawings |
| PO 4. Solve problems involving the area of simple polygons using formulas for rectangles and triangles. | Area<br>Using formulas |
| PO 5. Solve problems involving area and perimeter of regular and irregular polygons. | Area<br>Area of irregular shapes<br>Area problems<br>Perimeter |
| PO 6. Describe the relationship between the volume of a figure and the area of its base. | Cylinders, cones and spheres<br>Volume |

| **Grade 7** | |
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| **Strand 1: Number and Operations, Concept 1: Number Sense** | |
| PO 1. Recognize and convert between expressions for positive and negative rational numbers, including fractions, decimals, percents, and ratios. | Fractions and decimals<br>Equivalent fractions<br>Equivalent fractions, decimals and percentages<br>Ratio and rate |
| PO 2. Find or use factors, multiples, or prime factorization within a set of numbers. | Multiples and factors<br>Prime factorization |
| PO 3. Compare and order rational numbers using various models and representations. | Ordering integers<br>Ordering decimals<br>Ordering fractions<br>Using negative numbers in context<br>Inequalities<br>Introducing coordinates |
| PO 4. Model and solve simple problems involving absolute value. | Absolute value |
| **Strand 1: Number and Operations, Concept 2: Numerical Operations** | |
| PO 1. Add, subtract, multiply, and divide integers. | Adding and subtracting integers<br>Adding and subtracting integers activities<br>Using negative numbers in context<br>Multiplying and dividing integers<br>Divisibility<br>Mental addition and subtraction<br>Mental multiplication<br>Mental division<br>Written methods for addition and subtraction<br>Written methods for multiplication<br>Written methods for division |

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| PO 2. Solve problems with rational numbers and appropriate operations using exact answers or estimates. | Estimation and approximation<br>Adding and subtracting integers<br>Adding and subtracting integers activities<br>Using negative numbers in context<br>Multiplying and dividing integers<br>Divisibility<br>Mental addition and subtraction<br>Mental multiplication<br>Mental division<br>Written methods for addition and subtraction<br>Written methods for multiplication<br>Written methods for division<br>Adding and subtracting simple fractions<br>Methods for adding and subtracting fractions<br>One number as a fraction of another<br>Multiplying fractions<br>Dividing by fractions<br>Multiplying and dividing by 0.1 and 0.01<br>Multiplying by numbers between 0 and 1 |
| PO 3. Solve problems involving percentages, ratio and proportion, including tax, discount, tips, and part/whole relationships. | Calculating percentages mentally<br>Calculating percentages on paper<br>Calculating percentages with a calculator<br>Percentage change<br>Percentages and inverse operations<br>Comparing proportions<br>Ratio and rate<br>Dividing in a given ratio<br>Ratio and proportion problems<br>Using scale factors<br>Direct proportion |
| PO 4. Represent and interpret numbers using scientific notation (positive exponents only). | Scientific notation |
| PO 5. Simplify numerical expressions using the order of operations and appropriate mathematical properties. | Order of operations and PEMDAS<br>Properties of numbers |
| **Strand 1: Number and Operations, Concept 3: Estimation** | |
| PO 1. Estimate and apply benchmarks for rational numbers and common irrational numbers. | Circumference of a circle<br>Estimation and approximation |

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| PO 2. Make estimates appropriate to a given situation. | Estimation and approximation<br>Rounding<br>Estimating measurements |
| PO 3. Estimate square roots of numbers less than 1000 by locating them between two consecutive whole numbers. | Estimation and approximation<br>Square roots |
| PO 4. Estimate the measure of an object in one system of units given the measure of that object in another system and the approximate conversion factor. | Converting metric units<br>Customary unit conversions |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 1: Data Analysis (Statistics)** | |
| PO 1. Solve problems by selecting, constructing, and interpreting displays of data including multi-line graphs and scatterplots. | Appropriate graphs<br>Line graphs<br>Scatter plots<br>Histograms<br>Calculating statistics<br>Bar graphs<br>Circle graphs<br>Collecting data |
| PO 2. Interpret trends in a data set, estimate values for missing data, and predict values for points beyond the range of the data set. | Scatter plots |
| PO 3. Identify outliers and determine their effect on mean, median, mode, and range. | Calculating statistics<br>Finding the median<br>Finding the mode<br>Calculating the mean<br>Finding the range |
| PO 4. Distinguish between a simple random and non-random sample. | Population and sampling |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 2: Probability** | |
| PO 1. Determine conditional probabilities (experimental) in compound probability experiments. | Experimental probability |
| PO 2. Experiment with two different events to determine whether the two events are dependent or independent of each other. | - |
| PO 3. Compare the results of multiple repetitions of the same probability experiment to the theoretical probability. | Experimental probability<br>Calculating probability part 1 |
| PO 4. Compare probabilities to determine fairness in experimental situations. | The language of probability<br>Experimental probability |

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| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 3: Systematic Listing and Counting** | |
| PO 1. Analyze relationships among the tree diagrams where items repeat and do not repeat; make numerical connections to the multiplication principle of counting. | Probability diagrams |
| PO 2. Solve counting problems using Venn diagrams and represent the answer algebraically. | Venn diagrams |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 4: Vertex-Edge Graphs** | |
| PO 1. Use vertex-edge graphs and algorithmic thinking to represent and find solutions to practical problems related to Euler/Hamilton paths and circuits. | - |
| **Strand 3: Patterns, Algebra, and Functions, Concept 1: Patterns** | |
| PO 1. Recognize, describe, create, and analyze numerical and geometric sequences using tables or graphs; make conjectures about these sequences. | Introducing sequences<br>Sequences from geometrical patterns<br>Describing and continuing sequences<br>Generating sequences from flow charts<br>Generating sequences and rules<br>Finding the nth term<br>Sequences from practical contexts |
| **Strand 3: Patterns, Algebra, and Functions, Concept 2: Functions and Relationships** | |
| PO 1. Use a table of values to graph an equation or proportional relationship; describe the graph's characteristics. | Graphs of functions<br>Direct variations<br>Reading and plotting graphs |
| **Strand 3: Patterns, Algebra, and Functions, Concept 3: Algebraic Representations** | |
| PO 1. Write a single variable algebraic expression or one-step equation given a contextual situation. | Deriving formulas<br>Writing expressions |
| PO 2. Evaluate an expression containing one or two variables by substituting numbers for the variables. | Substitution |

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| PO 3. Solve multi-step equations using inverse properties with rational numbers. | Solving simple equations<br>Combining like terms<br>Multiplying algebraic terms<br>Dividing algebraic terms<br>Factoring expressions |
| PO 4. Translate between graphs and tables that represent a linear equation. | Graphs of functions |
| PO 5. Create and solve two-step equations that can be solved using inverse operations with rational numbers. | Solving simple equations<br>Combining like terms<br>Multiplying algebraic terms<br>Dividing algebraic terms<br>Factoring expressions |
| PO 6. Create and solve one-step inequalities with whole numbers. | Integer solutions for inequalities<br>Solving linear inequalities |
| **Strand 3: Patterns, Algebra, and Functions, Concept 4: Analysis of Change** | |
| PO 1. Use graphs and tables to model and analyze change. | Distance-time graphs<br>Interpreting graphs |
| **Strand 4: Geometry and Measurement, Concept 1: Geometric Properties** | |
| PO 1. Recognize the relationship between central angles and intercepted arcs; identify arcs and chords of a circle. | Circles |
| PO 2. Analyze and determine relationships between angles created by parallel lines cut by a transversal. | Angles made with parallel lines |
| PO 3. Draw and classify 3-dimensional figures with appropriate labels showing specified attributes of parallelism, congruence, perpendicularity, and symmetry. | Solid shapes<br>Congruence<br>Rotational symmetry |

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| PO 4. Describe the relationship between the number of sides in a regular polygon and the sum of its interior angles. | The sum of interior and exterior angles |
| PO 5. Identify corresponding parts of congruent figures. | Congruence |
| **Strand 4: Geometry and Measurement, Concept 2: Transformation of Shapes** | |
| PO 1. Model the result of a double transformation (translations or reflections) of a 2-dimensional figure on a coordinate plane using all four quadrants. | Translation<br>Reflection<br>Combining transformations |
| **Strand 4: Geometry and Measurement, Concept 4: Measurement** | |
| PO 1. Solve problems involving the circumference and area of a circle by calculating and estimating. | Circumference of a circle<br>Area of a circle |
| PO 2. Identify polygons having the same perimeter or area. | Perimeter<br>Area |
| PO 3. Calculate the area and perimeter of composite 2-dimensional figures. | Area<br>Perimeter<br>Area of irregular shapes |
| PO 4. Determine actual lengths based on scale drawings or maps. | Scale drawings |
| PO 5. Create a net to calculate the surface area of a given solid. | Surface area<br>Constructing nets |
| PO 6. Identify the appropriate unit of measure to compute the volume of an object and justify reasoning. | - |
| PO 7. Measure to the appropriate degree of accuracy and justify reasoning. | Reading scales<br>Rounding |
| **Grade 8** | |
| **Strand 1: Number and Operations, Concept 1: Number Sense** | |
| PO 1. Compare and order real numbers including very large and small integers, and decimals and fractions close to zero. | Ordering decimals<br>Ordering fractions<br>Scientific notation |
| PO 2. Classify real numbers as rational or irrational. | Rational and irrational numbers |
| PO 3. Model the relationship between the subsets of the real number system. | - |
| PO 4. Model and solve problems involving absolute value. | Absolute value |

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| **Strand 1: Number and Operations, Concept 2: Numerical Operations** | |
| PO 1. Solve problems with factors, multiples, divisibility or remainders, prime numbers, and composite numbers. | Multiples and factors<br>Divisibility<br>Prime numbers<br>Ratio and rate |
| PO 2. Describe the effect of multiplying and dividing a rational number by<br>•a number less than zero,<br>•a number between zero and one,<br>•one, and<br>•a number greater than one. | Multiplying by numbers between 0 and 1<br>Multiplying and dividing by 0.1 and 0.01<br>Multiplying and dividing integers<br>Properties of numbers<br>Multiplying fractions |
| PO 3. Solve problems involving percent increase, percent decrease, and simple interest rates. | Percentage change<br>Calculating percentages mentally<br>Calculating percentages on paper<br>Calculating percentages with a calculator<br>Percentages and inverse operations |
| PO 4. Convert standard notation to scientific notation and vice versa (include positive and negative exponents). | Scientific notation |
| PO 5. Simplify numerical expressions using the order of operations that include grouping symbols, square roots, cube roots, absolute values, and positive exponents. | Order of operations and PEMDAS<br>Absolute value<br>Powers<br>Square roots<br>Cubes and cube roots |
| **Strand 1: Number and Operations, Concept 3: Estimation** | |
| PO 1. Make estimates appropriate to a given situation. | Rounding<br>Estimation and approximation<br>Estimating measurements |
| PO 2. Estimate the location of rational and common irrational numbers on a number line. | Square roots<br>Estimation and approximation |

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| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 1: Data Analysis (Statistics)** | |
| PO 1. Solve problems by selecting, constructing, interpreting, and calculating with displays of data, including box and whisker plots and scatterplots. | Appropriate graphs<br>Scatter plots<br>Calculating statistics<br>Quartiles and box plots<br>Finding the mode<br>Finding the median<br>Calculating the mean<br>Finding the range<br>Interquartile range<br>Bar graphs<br>Line graphs<br>Circle graphs<br>Histograms |
| PO 2. Make inferences by comparing the same summary statistic for two or more data sets. | Comparing data<br>Quartiles and box plots<br>Interquartile range |
| PO 3. Describe how summary statistics relate to the shape of the distribution. | Calculating statistics<br>Comparing data<br>Quartiles and box plots |
| PO 4. Determine whether information is represented effectively and appropriately given a graph or a set of data by identifying sources of bias and compare and contrast the effectiveness of different representations of data. | Misleading graphs |
| PO 5. Evaluate the design of an experiment. | Population and sampling<br>Collecting data |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 2: Probability** | |
| PO 1. Determine theoretical and experimental conditional probabilities in compound probability experiments. | - |
| PO 2. Interpret probabilities within a given context and compare the outcome of an experiment to predictions made prior to performing the experiment. | Experimental probability |
| PO 3. Use all possible outcomes (sample space) to determine the probability of dependent and independent events. | Probability diagrams |

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| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 3: Systematic Listing and Counting** | |
| PO 1. Represent, analyze, and solve counting problems with or without ordering and repetitions. | Probability diagrams |
| PO 2. Solve counting problems and represent counting principles algebraically including factorial notation. | - |
| **Strand 2: Data Analysis, Probability, and Discrete Mathematics, Concept 4: Vertex-Edge Graphs** | |
| PO 1. Use directed graphs to solve problems. | - |
| **Strand 3: Patterns, Algebra, and Functions, Concept 1: Patterns** | |
| PO 1. Recognize, describe, create, and analyze numerical and geometric sequences using tables, graphs, words, or symbols; make conjectures about these sequences. | Introducing sequences<br>Sequences from geometrical patterns<br>Describing and continuing sequences<br>Generating sequences from flow charts<br>Generating sequences and rules<br>Finding the nth term<br>Sequences from practical contexts |

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| **Strand 3: Patterns, Algebra, and Functions, Concept 2: Functions and Relationships** | |
| PO 1. Sketch and interpret a graph that models a given context; describe a context that is modeled by a given graph. | Interpreting graphs<br>Distance-time graphs<br>Conversion graphs |
| PO 2. Determine if a relationship represented by a graph or table is a function. | Function notation and relations |
| PO 3. Write the rule for a simple function using algebraic notation. | Function machines<br>Mapping functions |
| PO 4. Identify functions as linear or nonlinear and contrast distinguishing properties of functions using equations, graphs, or tables. | Graphs of functions<br>The equation of a straight line<br>Graphs of nonlinear functions<br>Exploring nonlinear graphs |
| PO 5. Demonstrate that proportional relationships are linear using equations, graphs, or tables. | Direct variations<br>Exploring nonlinear graphs |
| **Strand 3: Patterns, Algebra, and Functions, Concept 3: Algebraic Representations** | |
| PO 1. Write or identify algebraic expressions, equations, or inequalities that represent a situation. | Solving linear inequalities<br>Writing expressions<br>Introducing formulas |
| PO 2. Evaluate an expression containing variables by substituting rational numbers for the variables. | Substitution<br>The equation of a straight line |
| PO 3. Analyze situations, simplify, and solve problems involving linear equations and inequalities using the properties of the real number system. | Properties of numbers<br>Solving simple equations<br>Solving linear inequalities |
| PO 4. Translate between different representations of linear equations using symbols, graphs, tables, or written descriptions. | Graphs of functions<br>Mapping functions<br>The equation of a straight line |
| PO 5. Graph an inequality on a number line. | Inequalities on a number line |
| **Strand 3: Patterns, Algebra, and Functions, Concept 4: Analysis of Change** | |
| PO 1. Interpret the relationship between a linear equation and its graph, identifying and computing slope and intercepts. | The equation of a straight line |
| PO 2. Solve problems involving simple rates. | - |
| **Strand 4: Geometry and Measurement, Concept 1: Geometric Properties** | |
| PO 1. Identify the attributes of circles: radius, diameter, chords, tangents, secants, inscribed angles, central angles, intercepted arcs, circumference, and area. | Circles<br>Circumference of a circle<br>Area of a circle |
| PO 2. Predict results of combining, subdividing, and changing shapes of plane figures and solids. | Cross sections<br>Tessellations |

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| PO 3. Use proportional reasoning to determine congruence and similarity of triangles. | Congruence<br>Finding missing lengths |
| PO 4. Use the Pythagorean Theorem to solve problems. | Pythagorean Theorem<br>Identifying right triangles<br>Calculating sides of right triangles<br>Pythagorean triples |

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| **Strand 4: Geometry and Measurement, Concept 2: Transformation of Shapes** | |
| PO 1. Model the result of rotations in multiples of 45 degrees of a 2-dimensional figure about the origin. | Rotation |
| PO 2. Describe the transformations that create a given tessellation. | Tessellations<br>Combining transformations |
| PO 3. Identify lines of symmetry in plane figures or classify types of symmetries of 2-dimensional figures. | Reflection symmetry<br>Rotational symmetry |
| **Strand 4: Geometry and Measurement, Concept 3: Coordinate Geometry** | |
| PO 1. Make and test a conjecture about how to find the midpoint between any two points in the coordinate plane. | Finding the midpoint of a line segment |
| PO 2. Use the Pythagorean Theorem to find the distance between two points in the coordinate plane. | - |
| **Strand 4: Geometry and Measurement, Concept 4: Measurement** | |
| PO 1. Solve problems involving conversions within the same measurement system. | Converting metric units<br>Customary unit conversions |
| PO 2. Solve geometric problems using ratios and proportions. | Finding missing lengths |
| PO 3. Calculate the surface area and volume of rectangular prisms, right triangular prisms, and cylinders. | Surface area<br>Volume<br>Cylinders, cones and spheres<br>Formulas for shapes |