School District of Nekoosa

Benchmarks for Math

March 2004

The benchmarks are educational goals that are established for the students in the district. As educators, we will do our best to provide all students with the instruction required to meet these goals.

Math benchmarks for grades K-3 are written in relation to the content area strands for the state standards. Other grade levels have aligned the benchmarks to specific state standards.

Algebraic Relationships

Kindergarten

1. Students will generate and continue a two-part pattern.
2. Students will express understanding of addition and subtraction.

1st Grade

1. Students will complete a growing arithmetic pattern by naming missing numbers and geometric shapes.
2. Students will write and solve a number sentence for a simple problem solving situation.
3. Students will recognize addition and subtraction fact families through 10.

2nd grade

1. Students will complete a growing arithmetic pattern using models by identifying the missing numbers.
2. Students will write and solve a number model in addition and subtraction, for numbers less than 100.
3. Students will demonstrate an understanding of the inverse relationship between multiplication and division.

3rd Grade

1. Students will identify and determine the operation, solve, and determine the reasonableness of an answer.
2. Students will solve addition, subtraction, and multiplication open equalities, and comparisons.
3. Students will understand the commutative property of multiplication, zero property of multiplication, and multiplication property of 1.

Geometry

Kindergarten

1. Students will recognize a circle, square, triangle, and rectangle.

1st Grade

1. Students will identify figures that are the same size and shape.

2nd grade

1. Students will identify, classify and name multiple shapes by sides and vertices.
2. Students will identify transformations of two-dimensional figures (rotations/ slides/ turns).

3. Students will determine and names locations in the first quadrant on a labeled coordinate grid.

3rd Grade

1. Students will identify a polygon, pentagon, cylinder, sphere, pyramid, and tetrahedron.
2. Students will identify the number of faces, corners, and edges of three-dimensional figures.
3. Students will identify congruent figures, transformations, and lines of symmetry of two-dimensional figures.

Mathematical Process, Operations, Relationships

Kindergarten

1. Students will match the number with a set of objects 0-10.
2. Students will read and write numbers 0-30.
3. Students will verbally count objects to 30.
4. Students will count backward from 15.
5. Students will count to 100.
6. Students will count by 10s to 100.
7. Students will recognize a penny, nickel, dime, and quarter.

1st Grade

1. Students will use a structural model to solve addition and subtraction problems using a variety of strategies. (I.e. pictures, manipulatives, patterns, tables, lists, simplification, process of elimination, trial and error, working backwards, models.)
2. Students will count and write numbers through 100.
3. Students will add and subtract two digit numbers with sums and differences to 10 in horizontal and vertical form.
4. Students will count money amounts using dimes, nickels, and pennies to $.50.

2nd grade

1. Students will use words, pictures, numbers, and technology to explain the solution to problems.
2. Students will identify the place value of each digit in whole numbers through the thousands place.
3. Students will identify the numerical and written name for whole numbers 1000 to 9,999.
4. Students will identify the ordinal number that comes before, between, or after a given ordinal number.
5. Students will count collections of coins and bills to $10.00 and makes change to $1.00.
6. Students will add and subtract 3-digit numbers with regrouping.
7. Students will multiply a two-digit number by a one-digit number.
8. Students will use rounding to answer addition and subtraction problems through 100.
9. Students will recognize a fraction as a part of a whole.

3rd Grade

1. Students will identify place value through 100,000.
2. Students will write numbers in standard and expanded form.
3. Students will round to the nearest 10, 100, and 1000.
4. Students will identify parts of a whole as a fractional part, as well as add fractions with like denominators.
5. Students will identify and count money, and make change up to $10.00.
6. Students will be able to add and subtract 4 digit numbers with regrouping.
7. Students will be able to recall multiplication facts with factors 0-10.

8. Students will be able to multiply a three digit by a two-digit number and divide with dividends up to 45 and divisors up to 5.

Measurement

Kindergarten

1. Students will compare objects by length, height, weight, and volume.
2. Students will measure height and length using nonstandard and standard units.
3. Students will tell time to the hour.

1st Grade

1. Students will tell time to the hour and half hour.
2. Students will measure length with a ruler to the nearest inch or centimeter.
3. Students will read a calendar.

2nd grade

1. Students will select the appropriate type and size of unit in length, height, weight, capacity, and time.
2. Students will determine elapsed time less than 1 hour.
3. Students will tell time to 5-minute intervals.
4. Students will determine the perimeter of a figure where all sides are labeled.

3rd Grade

1. Students will choose appropriate units for length, height, weight, capacity and time.
2. Students will measure to the nearest cm, 1/2", and 1/4".
3. Students will find elapsed time to 15 minutes.
4. Students will find the perimeter and area of basic shapes.

Statistics and Probability

Kindergarten

1. Students will perform simple data collection and graphing.

1st Grade

1. Students will interpret simple graphs or tables.
2. Students will investigate probability of "more likely" or "less likely" using a table.

2nd grade

1. Students will read and interprets data from tally charts, pictographs, and bar graphs.
2. Students will determine "more likely' or "less likely" when using a spinner.

3rd Grade

1. Students can collect, organize, and interpret data using charts, bar graphs, and coordinate planes.
2. Students will use a spinner to determine the likelihood of an answer.

4th Grade

1. Students will subtract and add money amounts through story problems. (A.4.2, A.4.3, A.4.4, B.4.1, B.4.5, D.4.1)

2. Students will draw and measure line segments to the nearest centimeter. (D.4.1, D.4.2, D.4.3, D.4.4, D.4.5)
3. Students will name, draw, label, identify, and describe line segments, lines, rays, angles, triangles, and quadrangles. (C.4.1, C.4.2, C.4.3)
4. Students will demonstrate a successful strategy for adding and subtracting multi-digit numbers. (A.4.2, A.4.3, A.4.4, A.4.5, B.4.5)
5. Students will read, write, and compare numerals to hundred millions, and then give the value of the digits in numerals to hundred millions. (A.4.4, A.4.5, B.4.1)
6. Students will solve basic multiplication facts and understand the relationship between multiplication and division. (A.4.2, A.4.4, A.4.5, B.4.2)
7. Students will identify and draw lines of symmetry, lines of reflection, reflected figures, and figures with line symmetry. (A.4.2, C.4.1, C.4.2)
8. Students will identify fractional parts and the whole part of a collection of objects. (A.4.2, B.4.2, E.4.2)

5th Grade

1. Students will model multiplication basic facts and extend to two-digit by two-digit multiplication. (A.8.1, B.8.1, B.8.2)
2. Students will model basic division facts and find a quotient and remainder of a whole number divided by a one-digit number. (A.8.1, B.8.1, B.8.2)
3. Students will draw and measure line segments to the nearest millimeter and 1/8 and 1/16 of an inch. (D.8.1, D.8.2, D.8.3, D.8.4)
4. Students will model different types of angles (acute, obtuse, and right) and use a protractor to measure an angle to within two degrees. (D.8.1, D.8.2, D.8.3, D.8.4)
5. Students will convert among fractions, decimals, and percents. (A.8.1, B.8.1, B.8.2, B.8.3)
6. Students will model the divisibility for the numbers two, three, five, nine, and ten. (B.8.1, B.8.2)
7. Students will model magnitude estimates using friendly numbers. (A.8.2, A.8.3)
8. Students will model landmarks for range, maximum, minimum, median, and mode for data. (A.8.1, A.8.3)
9. Students will identify odd-even numbers, prime and composite, and list factors of numbers through 30. ((A.8.1, B.8.1)
10. Students will model perimeter. (A.8.1)

6th Grade

1. Students will model basic division facts and find a quotient as remainder of a whole number divided by a two-digit number. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, B.8.1, B.8.7)
2. Students will compute with fractions, decimals and mixed numerals. (.8.1, A.8.2, A.8.3, A.8.5, A.8.6, B.8.1, B.8.7)
3. Students will find the probability of like and unlike events. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, E.8.7)
4. Students will identify area and perimeter of polygons and irregular shapes. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, B.8.1, B.8.7, C.8.1)
5. Students will demonstrate knowledge of prime and composite numbers through 1 – 50. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, B.8.1)
6. Students will compare and order fractions with decimals. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, B.8.1, B.8.7)
7. Students will find common factors of 2-digit numbers. (B.8.1)
8. Students will find common multiples of numbers under 25. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, B.8.1)

9. Students will demonstrate calculating mode, median, mean and range for a set of numbers. (A.8.1, A.8.2, A.8.3, A.8.5, A.8.6, E.8.1)

7th Grade

1. Students will add, subtract, multiply, and divide with decimals, fractions, and integers. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, B.8.1, B.8.2, B.8.3, B.8.4, B.8.7, C.8.2, D.8.1, D.8.4, E.8.4
2. Students will compare quantities using ratios, rates, percents, scaling, differences, and fractions. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, B.8.1, B.8.2, B.8.3, B.8.4, B.8.5, B.8.6, B.8.7, D.8.1, E.8.1, E.8.2, E.8.4
3. Students will find surface areas and volumes of cubes, rectangular prisms, cones, spheres, and cylinders. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, B.8.1, B.8.3, B.8.7, C.8.1, C.8.2, C.8.3, C.8.4, C.8.5, D.8.1, D.8.2, D.8.3, D.8.4
4. Students will create and interpret coordinate graphs. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, C.8.5, D.8.1, D.8.4, E.8.1, E.8.2, E.8.4, F.8.1, F.8.2, F.8.3, F.8.4
5. Students will be introduced to variables and linear equations. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, D.8.1, D.8.4, E.8.1, E.8.2, E.8.4, F.8.1, F.8.2, F.8.3, F.8.4
6. Students will find probabilities for single and multiple events. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, B.8.1, B.8.2, B.8.3, B.8.4, E.8.1, E.8.2, E.8.3, E.8.4, E.8.7
7. Students will recognize and interpret similarities between various geometric shapes. A.8.1, A.8.2, A.8.3, A.8.4, A.8.5, A.8.6, B.8.3, B.8.5, B.8.6, B.8.7, C.8.1, C.8.2, C.8.4, C.8.5, D.8.1, D.8.2, D.8.4
8. Students will review and demonstrate basic computational facts. B.8.1, B.8.2, B.8.4, B.8.5, B.8.6, F.8.1, F.8.2, F.8.4, F.8.5

8th Grade

1. Students will use manipulatives, pictures, symbols, or technology to add, subtract, multiply, and divide, decimals, fractions, integers, and mixed numbers with and without variables and identify and use rational number properties. (A.8.1, A.8.2, A.8.4, A.8.5, B.8.1, B.8.2, B.8.3, B.8.7)
2. The students will identify, solve, and relate various properties of linear equations including graphs, tables, and equations with or without technology. (A.8.1, A.8.2, A.8.4, A.8.5, C.8.5, F.8.1, F.8.2, F.8.4, F.8.5)
3. The student will identify, solve and relate various properties of exponential equations including graphs, tables, and equations with or without technology. (A.8.1, A.8.2, A.8.4, A.8.5, C.8.5, E.8.2, F.8.1, F.8.2, F.8.3, F.8.5)
4. The student will correctly identify linear, exponential, and quadratic relationships through the use of graphs, tables, and equations. (A.8.1, A.8.2, A.8.4, A.8.5, C.8.5, E.8.2, F.8.1, F.8.2, F.8.3, F.8.4, F.8.5)
5. The students will identify, solve, and relate various properties of quadratic relationships using tables, graphs, and equations. (A.8.1, A.8.2, A.8.4, A.8.5, F.8.1, F.8.2, F.8.3, F.8.5)
6. The students will demonstrate understanding of the geometry of the right triangle, and properties of right triangles, by using the Pythagorean theorem, with respect to area and lengths. (A.8.1, A.8.2, A.8.4, A.8.5, C.8.1, C.8.5, D.8.1, D.8.5)

High School

Technical Math

1. Students will demonstrate knowledge of English and metric system. (A12.1, 12.5, B12.2, 12.4, 12.5, C12.1, 12.2, D12.2, E12.1)
2. Students will demonstrate development of problem solving skills. (A12.1, 12.2, 12.3, 12.4, B12.1, 12.2, 12.5, E12.1)
3. Students will demonstrate mental math abilities (rounding and estimation). (A12.1, 12.2, 12.3, 12.4, 12.5, B12.2, 12.3, 12.4, 12.5, C12.1, 12.2, D12.2)

4. Students will demonstrate use of proportions in real-life situations. (A12.1, 12.5, B12.5)
5. Students will demonstrate reading and gaining information from various graphs and charts. (A12.1, 12.3, 12.4, C12.2, E12.2)
6. Students will demonstrate how to write expressions and equations in real-life situations. (A12.1, 12.2, B12.2, D12.1, F12.2, 12.3, 12.4)
7. Students will demonstrate real-life math in the forms of checking accounts and preparing taxes, etc. (A12.1, 12.5, B12.4)

Core Plus I

1. Students will be able to express patterns of change as seen in tables, graphs, and rules. (A12.1, A12.2, A12.3, A12.4, A12.5, B12.5, E12.1, F12.2, F12.4)
2. Students will demonstrate the use of linear graphs, tables, and rules to solve problems. (A12.5, F12.2, F12.4)
3. Students will solve problems involving exponential growth, exponential decay, and compound growth. (A12.1, A12.2, A12.3, A12.5, A12.6 F.12.2, F.12.4)
4. Students will demonstrate the ability to identify space-shapes and find their surface areas and volumes. (A12.2, A12.4, A12.5, A12.6, C12.1, C12.2)
5. Students will demonstrate the ability to make and interpret a variety of different graphs from a given set of data. (A12.1, A12.2, A12.4, A12.6, E12.1, E12.2, E12.3)
6. Students will demonstrate solutions to problems involving efficient routes, managing conflict, and scheduling projects. (A12.1, A12.4, A12.5, A12.6, C12.2)
7. Students will demonstrate how to use simulations to solve probability problems. (A12.1, A12.2, A12.3, A12.5, E12.1, E12.2, E12.5)

Core Plus II

1. Students will demonstrate the use of tables, graphs, and equations to solve problems that inverse variations and quadratic models. (A.12.1, A.12.4, A.12.5, A.12.6, B.12.3, B.12.5, B.12.6, F.12.1, F.12.2, F.12.4)
2. Students will demonstrate the use of the trigonometric ratios to solve for missing parts of right triangles. (A.12.4, A.12.5, A.12.6, C.12.1, C.12.2, C.12.5, D.12.2, F12.4)
3. Students will demonstrate the ability to find the best methods and shortest paths and circuits. (A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, A.12.6, B.12.2, B.12.5, B.12.6, C.12.1, C.12.2)
4. Students will express the probability that two independent and dependant events both occur. (A.12.1, A.12.3, A.12.5, E.12.2, E.12.3, E.12.5)
5. Students will express solutions to problems involving matrices and matrix operations. (A.12.1, A.12.2, A.12.5, A.12.6, B.12.2) Students will demonstrate coordinate models of transformation and the use of distance, slope, and midpoint formulas to solve problems. (A.12.1, A.12.4, A.12.6, B.12.3, B.12.6, C.12.1, C.12.4, F.12.1)
6. Students will be able to find and interpret correlation coefficients. (A.12.1, A.12.2, A.12.6, B.12.3, B.12.4, C.12.4, F.12.3)

Core Plus III

1. Students will solve systems of linear equations. (A.12.6, B.12.2, C.12.2, F.12.3)
2. Students will describe the table and graph expected, given an algebraic rule in function form. (A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, B.12.2, B.12.3, B.12.4, B.12.5, C.12.4, F.12.1, F.12.2, F.12.4)
3. Students will find measures of sides and angles in right triangles from given information. (B.12.4, C.12.2, C.12.5, D.12.2)
4. Students will explore multiple-variable relation through tables, graphs, and symbolic rules. (A.12.1, A.12.2, A.12.3, A.12.5, B.12.2, B.12.3, B.12.4, E.12.1, F.12.1, F.12.2)

5. Students will recognize how the graph and table of a function relate to the graph and table of a reflection and the vertical transformed function. (F.12.2, F.12.4)
6. Students will solve systems of equations. (A.12.5, F.12.4)
7. Students will understand and use voting/surveys as a method for measuring and analyzing public opinion. (A.12.3, A.12.5, E.12.1, E.12.4)
8. Students will learn and apply some common vote-analysis methods: majority, plurality, points-for-preference, runoff, pair wise-comparison, and approval. (A.12.1, A.12.3, A.12.5, B.12.2, E.12.1, E.12.2, E.12.4)
9. Students will define and investigate the notion of "likely sample outcomes" using 90% box plots. (A.12.3, A.12.5, B.12.2, E.12.1)
10. Students will determine whether a relationship is a function by inspecting its graph or table. (A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, B.12.2, B.12.3, B.12.4, B.12.5, C.12.4, F.12.1, F.12.2, F.12.4)
11. Students will determine the equivalence of different forms of symbolic rules by examining tables of values, by graphing, and by simplifying algebraic rules. (A.12.1, A.12.2, A.12.4, A.12.5, B.12.3, B.12.4, C.12.4, F12.3)
12. Students will solve quadratic equations and inequalities by using the quadratic formula. (A.12.1, B.12.2, B.12.3, B.12.4, C.12.3, C.12.4, F.12.3, F.12.4)
13. Students will know and be able to use angle relationship theorems that result from the intersection of two lines or to use the angle-sum theorem for triangles. (A.12.3, A.12.4, B.12.3, C.12.2, C.12.4)
14. Students will compute the standard deviation from a set of data and to estimate the standard deviation from a histogram and to recognize that the standard deviation is sensitive to extreme values. (B.12.3, B.12.5, E.12.1, E.12.3)
15. Students will recognize that in a normal distribution, 68% of the data are within one standard deviation of the mean, 95% are within two standard deviations, and 99.7% are within three standard deviations of the mean, and describe characteristics of normal distribution, and understand that the number of standard deviations from the mean is a measure of location. (A.12.6, E.12.2, E.12.3)
16. Students will model and answer questions about contexts using linear, exponential, power, and trigonometric functions and describe the table and graph patterns expected for these functions from the symbolic forms. (A.12.2, A.12.5, F.12.1, F.12.2, F.12.3, F.12.4)

Core Plus IV

1. Students will demonstrate how to estimate and calculate both rate of change and net change. (A.1, A.2, A.5, A.6, B.2, B.3, B.6, C.1, C.2, C.4, D.1, E.1, F.2, F.4)
2. Students will demonstrate use of vector concepts to represent linear, projectile, circular, and elliptical motions. (A.1, A.2, A.5, B.6, C.1, C.2, C.4, E.1, R.2, F.3, F.4)
3. Students will demonstrate an understanding in the inverse relationship between logarithms and exponents, and use this relationship to simplify complex computations. (A.1, 1.6, B.2, E.2, F.1, F.2)
4. Students will demonstrate various theorems and rules related to counting models. (A.1, B.1, B.2, B.4, B.6)
5. Students will demonstrate use of binomial distributions to calculated probabilities. (A.1, B.5, E.1, E.2, E.3, E.5)
6. Students will recognize polynomial and rational function. (A.1, A.5, C.4, F.1, F.2, F.3, F.4)
7. Students will demonstrate understanding of trigonometric functions. (A.1, A.2, C.3, C.5)

Advanced Placement Calculus (Association to State Standards will be completed in the future)

1. Students will be able to write an equation and sketch a graph of a line given specific information.

2. Students will be able to identify the relationships between parallel lines, perpendicular lines, and slopes.
3. Students will be able to use linear regression equations to solve problems.
4. Students will be able to recognize even functions and odd functions using equations and graphs.
5. Students will be able to use exponential equations to solve problems.
6. Students will be able to convert between radians and degrees.
7. Students will be able to generate the graphs of the trigonometric functions and explore various transformations upon these graphs.
8. Students will be able to use the inverse trigonometric functions to solve problems.
9. Students will be able to calculate average and instantaneous speeds.
10. Students will be able to calculate limits and identify vertical and horizontal asymptotes.
11. Students will be able to identify the intervals upon which a given function is continuous and understand the meaning of a continuous function.
12. Students will be able to remove removable discontinuities by extending or modifying a function.
13. Students will be able to find the equations of the tangent line and normal line to a curve at a given point.
14. Students will be able to find the average rate of change of a function.
15. Students will be able to calculate slopes and derivatives using the definition of the derivative.
16. Students will be able to graph *f*' from the graph of *f*.
17. Students will be able to approximate derivatives numerically and graphically.
18. Students will be able to use the rules of differentiation to calculate derivatives, including second and higher order derivatives.
19. Students will be able to use the rules for differentiating the six basic trigonometric functions.
20. Students will be able to differentiate composite functions using the Chain Rule.
21. Students will be able to find the derivatives using implicit differentiation.
22. Students will be able to find the derivatives using the Power Rule for Rational Powers of *x*.
23. Students will be able to calculate derivatives of exponential and logarithmic functions.
24. Students will be able to determine the local or global extreme values of a function.
25. Students will be able to apply the Mean Value Theorem and to find intervals on which a function is increasing or decreasing.
26. Students will be able to use the First and Second Derivative Tests to determine the local extreme values of a function.
27. Students will be able to determine the concavity of a function and locate the points of inflection by analyzing the second derivative.
28. Students will be able to find linearizations.
29. Students will be able to approximate the area under the graph of a nonnegative continuous function by using rectangle approximation methods.
30. Students will be able to interpret the area under a graph as a net accumulation of a rate of change.
31. Students will be able to express the area under a curve as a definite integral and as a limit of Riemann sums.
32. Students will be able to compute the area under a curve using a numerical integration procedure.
33. Students will be able to apply rules for definite integrals and find the average value of a function over a closed interval.
34. Students will be able to apply the Fundamental Theorem of Calculus.
35. Students will be able to approximate the definite integral by using the Trapezoidal Theorem.
36. Students will be able to find antiderivatives of polynomials and selected trigonometric functions of *kx*, as well as linear combinations of these functions.

37. Students will be able to construct slope fields using technology and interpret slope fields as visualizations of differentials equations.
38. Students will be able to use integration to calculate areas of regions in a plane.

High School, Level II

1. Students will demonstrate the ability to solve problems involving percent, tax, commissions, interest, and tips. (A.12.1, A.12.2, A.12.5, B.12.2, B.12.3, B.12.4, B.12.5)
2. Students will be able to read and construct a variety of graphs. (A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, B.12.2, B.12.3, D.12.3, F.12.2, F.12.3)
3. Students will demonstrate an ability to solve problems, which involve objects and models, scale drawings and ratios. (A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, A.12.6, B.12.2, B.12.3)
4. Students will successfully make conversions involving metric units and customary units. (A.12.1)

High School, Level III

1. Students will successfully utilize number lines to calculate and represent math steps. (A.12.1, A.12.2, A.12.5, B.12.3 B.12.5)
2. Students will solve operations sentences with positive and negative integers. (A.12.1, A.12.2, A.12.5, B.12.3, B.12.4, B.12.5)
3. Students will solve for a variable in an open sentence involving addition, subtraction, multiplication and division. (A.12.1, A.12.2, A.12.3, A.12.5, B.12.3, B.12.4, B.12.5, F.12.4)
4. Students will demonstrate the ability to utilize algebraic concepts while problem solving. (A.12.1, A.12.2, A.12.3, A.12.5, B.12.3, B.12.4 B.12.5, F.12, 2, F.12.4)

High School, Level IV

1. Students will identify formulas for determining volume and area. (A.12.1, A.12.2, A.12.5, A.12.6, B.12.3, B.12.4, B.12.5, C.12.2)
2. Students will demonstrate an ability to identify formulas for radius, diameter, and circumference of a circle. (A.12.1, A.12.2, A.12.5, A.12.6, B.12.3, B.12.4, B.12.4, B.12.5, C.12.2)
3. Students will successfully find perimeter of different polygons. (A.12.1, A.12.2, A.12.5, A.12.6, B.12.3, B.12.4, B.12.5, C.12.2)
4. Students will use the Pythagorean theorem to determine length of an unknown side. (A.12.1, A.12.2, A.12.5, A.12.6, B.12.3, B.12.4, B.12.5, C.12.2)
5. Students will use their understanding of proportions and similarity to find the missing sides of two similar objects. (A.12.1, A.12.2, A.12.5, A.12.6, B.12.3, B.12.4, B.12.5, C.12.2)