**Prep for Calculus**

This course covers the topics outlined below. You can customize the scope and sequence of this course to meet your curricular needs.

**Curriculum (281 topics + 125 additional topics)**

- **Real Numbers (27 topics)**
  - **Fractions (5 topics)**
    - Simplifying a fraction
    - Using a common denominator to order fractions
    - Addition or subtraction of fractions with different denominators
    - Fraction multiplication
    - Fraction division
  - **Percents and Proportions (7 topics)**
    - Converting between percentages and decimals
    - Applying the percent equation
    - Finding the sale price without a calculator given the original price and percent discount
    - Finding the original price given the sale price and percent discount
    - Solving a proportion of the form \( x/a = b/c \)
    - Word problem on proportions: Problem type 1
    - Word problem on proportions: Problem type 2
- **Signed Numbers (15 topics)**
  - Integer addition: Problem type 2
  - Integer subtraction: Problem type 3
  - Signed fraction addition or subtraction: Basic
  - Signed fraction addition or subtraction: Advanced
  - Signed decimal addition and subtraction with 3 numbers
  - Integer multiplication and division
  - Signed fraction multiplication: Basic
  - Signed fraction multiplication: Advanced
  - Exponents and integers: Problem type 1
  - Exponents and signed fractions
  - Order of operations with integers and exponents
  - Evaluating a linear expression: Integer multiplication with addition or subtraction
  - Evaluating a quadratic expression: Integers
  - Absolute value of a number
  - Operations with absolute value: Problem type 2
- **Equations and Inequalities (24 topics)**
  - **Linear Equations (15 topics)**
    - Additive property of equality with integers
    - Multiplicative property of equality with signed fractions
    - Solving a two-step equation with integers
    - Solving a two-step equation with signed fractions
    - Solving a linear equation with several occurrences of the variable: Variables on the same side and distribution
    - Solving a linear equation with several occurrences of the variable: Variables on both sides and
fractional coefficients
◊ Solving a linear equation with several occurrences of the variable: Variables on both sides and distribution
◊ Solving a linear equation with several occurrences of the variable: Variables on both sides and two distributions
◊ Solving a linear equation with several occurrences of the variable: Fractional forms with binomial numerators
◊ Solving equations with zero, one, or infinitely many solutions
◊ Algebraic symbol manipulation: Problem type 1
◊ Algebraic symbol manipulation: Problem type 2
◊ Solving a word problem with two unknowns using a linear equation
◊ Solving a decimal word problem using a linear equation of the form $Ax + B = C$
◊ Solving a value mixture problem using a linear equation

♦ Linear Inequalities (6 topics)
◊ Solving a linear inequality: Problem type 2
◊ Solving a linear inequality: Problem type 3
◊ Solving a linear inequality: Problem type 4
◊ Graphing a compound inequality on the number line
◊ Solving a compound linear inequality: Graph solution, basic
◊ Solving a compound linear inequality: Interval notation

♦ Absolute Value Equations and Inequalities (3 topics)
◊ Solving an absolute value equation of the form $a|x| = b$ or $|x|+a = b$
◊ Solving an absolute value equation of the form $|ax+b| = c$
◊ Solving an absolute value inequality: Basic

♦ Exponents and Polynomials (43 topics)
◆ Properties of Exponents (13 topics)
◊ Evaluating an expression with a negative exponent: Positive fraction base
◊ Evaluating an expression with a negative exponent: Negative integer base
◊ Introduction to the product rule of exponents
◊ Product rule with positive exponents: Multivariate
◊ Product rule with negative exponents
◊ Quotient of expressions involving exponents
◊ Quotient rule with negative exponents: Problem type 1
◊ Introduction to the power rules of exponents
◊ Power rules with positive exponents
◊ Power of a power rule with negative exponents
◊ Power rules with negative exponents
◊ Power and product rules with positive exponents
◊ Power, product, and quotient rules with negative exponents

◆ Scientific Notation (2 topics)
◊ Scientific notation with positive exponent
◊ Scientific notation with negative exponent

◆ Polynomial Expressions (9 topics)
◊ Degree and leading coefficient of a univariate polynomial
◊ Combining like terms: Advanced
◊ Simplifying a sum or difference of two univariate polynomials
◊ Multiplying a univariate polynomial by a monomial with a positive coefficient
◊ Multiplying a multivariate polynomial by a monomial
◊ Multiplying binomials with leading coefficients of 1
◊ Multiplying conjugate binomials: Univariate
◊ Squaring a binomial: Univariate
◊ Multiplication involving binomials and trinomials in two variables

◆ Factoring (9 topics)
Introduction to the GCF of two monomials
◊ Greatest common factor of two multivariate monomials
◊ Factoring out a monomial from a polynomial: Univariate
◊ Factoring out a monomial from a polynomial: Multivariate
◊ Factoring a quadratic with leading coefficient 1
◊ Factoring a quadratic with leading coefficient greater than 1
◊ Factoring a product of a quadratic trinomial and a monomial
◊ Factoring a difference of squares
◊ Factoring a polynomial by grouping: Problem type 1
♦ Quadratic Equations (10 topics)
  ◊ Solving an equation written in factored form
  ◊ Finding the roots of a quadratic equation with leading coefficient 1
  ◊ Finding the roots of a quadratic equation with leading coefficient greater than 1
  ◊ Solving a quadratic equation needing simplification
  ◊ Solving a quadratic equation using the square root property: Exact answers, basic
  ◊ Completing the square
  ◊ Applying the quadratic formula: Exact answers
  ◊ Solving a word problem using a quadratic equation with rational roots
  ◊ Solving a word problem using a quadratic equation with irrational roots
  ◊ Solving a quadratic inequality written in factored form

♦ Lines and Systems (30 topics)
  ◦ Ordered Pairs (2 topics)
    ◊ Plotting a point in the coordinate plane
    ◊ Finding a solution to a linear equation in two variables
  ◦ Graphing Lines (5 topics)
    ◊ Graphing a line given its x– and y–intercepts
    ◊ Graphing a line given its equation in slope–intercept form
    ◊ Graphing a line given its equation in standard form
    ◊ Graphing a line through a given point with a given slope
    ◊ Graphing a vertical or horizontal line
  ◦ Equations of Lines (13 topics)
    ◊ Finding the y–intercept of a line given its equation
    ◊ Finding x– and y–intercepts of a line given the equation: Advanced
    ◊ Finding slope given the graph of a line on a grid
    ◊ Finding slope given two points on the line
    ◊ Finding the slope of a line given its equation
    ◊ Writing an equation of a line given the y–intercept and another point
    ◊ Writing the equation of a line given the slope and a point on the line
    ◊ Writing the equation of the line through two given points
    ◊ Finding slopes of lines parallel and perpendicular to a line given in the form Ax + By = C
    ◊ Writing equations of lines parallel and perpendicular to a given line through a point
    ◊ Writing an equation and drawing its graph to model a real–world situation: Advanced
    ◊ Application problem with a linear function: Finding a coordinate given the slope and a point
    ◊ Application problem with a linear function: Finding a coordinate given two points
  ◦ Graphing Linear Inequalities (2 topics)
    ◊ Graphing a linear inequality in the plane: Standard form
    ◊ Graphing a linear inequality in the plane: Vertical or horizontal line
  ◦ Systems of Linear Equations (8 topics)
    ◊ Graphically solving a system of linear equations
    ◊ Solving a system of linear equations using substitution
    ◊ Solving a system of linear equations using elimination with multiplication and addition
    ◊ Solving a word problem involving a sum and another basic relationship using a system of linear equations
<table>
<thead>
<tr>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>◇ Solving a value mixture problem using a system of linear equations</td>
</tr>
<tr>
<td>◇ Solving a distance, rate, time problem using a system of linear equations</td>
</tr>
<tr>
<td>◇ Solving a percent mixture problem using a system of linear equations</td>
</tr>
<tr>
<td>◇ Interpreting the graphs of two functions</td>
</tr>
<tr>
<td>• Functions and Graphs (34 topics)</td>
</tr>
<tr>
<td>◦ Sets, Relations, and Functions (10 topics)</td>
</tr>
<tr>
<td>◇ Union and intersection of finite sets</td>
</tr>
<tr>
<td>◇ Set–builder and interval notation</td>
</tr>
<tr>
<td>◇ Union and intersection of intervals</td>
</tr>
<tr>
<td>◇ Identifying functions from relations</td>
</tr>
<tr>
<td>◇ Vertical line test</td>
</tr>
<tr>
<td>◇ Evaluating functions: Linear and quadratic or cubic</td>
</tr>
<tr>
<td>◇ Evaluating functions: Absolute value, rational, radical</td>
</tr>
<tr>
<td>◇ Evaluating a piecewise–defined function</td>
</tr>
<tr>
<td>◇ Variable expressions as inputs of functions: Problem type 1</td>
</tr>
<tr>
<td>◇ Domain and range from ordered pairs</td>
</tr>
<tr>
<td>◦ Graphs and Transformations (16 topics)</td>
</tr>
<tr>
<td>◇ Finding intercepts of a nonlinear function given its graph</td>
</tr>
<tr>
<td>◇ Finding local maxima and minima of a function given the graph</td>
</tr>
<tr>
<td>◇ Domain and range from the graph of a continuous function</td>
</tr>
<tr>
<td>◇ Writing an equation for a function after a vertical translation</td>
</tr>
<tr>
<td>◇ Writing an equation for a function after a vertical and horizontal translation</td>
</tr>
<tr>
<td>◇ Translating the graph of a function: One step</td>
</tr>
<tr>
<td>◇ Translating the graph of a function: Two steps</td>
</tr>
<tr>
<td>◇ Transforming the graph of a function by reflecting over an axis</td>
</tr>
<tr>
<td>◇ Transforming the graph of a function by shrinking or stretching</td>
</tr>
<tr>
<td>◇ Finding the x–intercept(s) and the vertex of a parabola</td>
</tr>
<tr>
<td>◇ Graphing a parabola of the form ( y = ax^2 )</td>
</tr>
<tr>
<td>◇ Graphing a parabola of the form ( y = (x-h)^2 + k )</td>
</tr>
<tr>
<td>◇ Graphing a parabola of the form ( y = ax^2 + bx + c ): Integer coefficients</td>
</tr>
<tr>
<td>◇ Rewriting a quadratic function to find the vertex of its graph</td>
</tr>
<tr>
<td>◇ Graphing a cubic function of the form ( y = ax^3 )</td>
</tr>
<tr>
<td>◇ Graphing an absolute value equation in the plane: Advanced</td>
</tr>
<tr>
<td>◦ Polynomial Functions (2 topics)</td>
</tr>
<tr>
<td>◇ Finding zeros of a polynomial function written in factored form</td>
</tr>
<tr>
<td>◇ Finding x– and y–intercepts given a polynomial function</td>
</tr>
<tr>
<td>◦ Combining Functions; Composite Functions; Inverse Functions (6 topics)</td>
</tr>
<tr>
<td>◇ Sum, difference, and product of two functions</td>
</tr>
<tr>
<td>◇ Quotient of two functions: Basic</td>
</tr>
<tr>
<td>◇ Composition of two functions: Basic</td>
</tr>
<tr>
<td>◇ Composition of two functions: Advanced</td>
</tr>
<tr>
<td>◇ Inverse functions: Linear, discrete</td>
</tr>
<tr>
<td>◇ Inverse functions: Rational</td>
</tr>
<tr>
<td>◦ Rational Expressions (30 topics)</td>
</tr>
<tr>
<td>◦ Rational Expressions (20 topics)</td>
</tr>
<tr>
<td>◇ Domain of a rational function: Excluded values</td>
</tr>
<tr>
<td>◇ Simplifying a ratio of polynomials: Problem type 1</td>
</tr>
<tr>
<td>◇ Simplifying a ratio of polynomials: Problem type 2</td>
</tr>
<tr>
<td>◇ Simplifying a ratio of multivariate polynomials</td>
</tr>
<tr>
<td>◇ Multiplying rational expressions involving multivariate monomials</td>
</tr>
<tr>
<td>◇ Multiplying rational expressions involving quadratics with leading coefficients of 1</td>
</tr>
<tr>
<td>◇ Dividing rational expressions involving multivariate monomials</td>
</tr>
<tr>
<td>◇ Introduction to the LCM of two monomials</td>
</tr>
</tbody>
</table>
◊ Least common multiple of two monomials
◊ Adding rational expressions with common denominators and binomial numerators
◊ Adding rational expressions with different denominators: ax, bx
◊ Adding rational expressions with multivariate monomial denominators: Advanced
◊ Complex fraction without variables: Problem type 1
◊ Complex fraction without variables: Problem type 2
◊ Complex fraction involving multivariate monomials
◊ Complex fraction: GCF and quadratic factoring
◊ Dividing a polynomial by a monomial: Univariate
◊ Polynomial long division: Problem type 1
◊ Polynomial long division: Problem type 2

• Rational Equations (6 topics)
  ◊ Solving a rational equation that simplifies to linear: Denominator x
  ◊ Solving a rational equation that simplifies to linear: Denominator x+a
  ◊ Solving a rational equation that simplifies to linear: Unlike binomial denominators
  ◊ Solving a rational equation that simplifies to linear: Denominators a, x, or ax
  ◊ Solving a rational equation that simplifies to quadratic: Binomial denominators, constant numerators
  ◊ Solving a rational equation that simplifies to quadratic: Binomial denominators and numerators

• Applications of Rational Expressions (2 topics)
  ◊ Word problem on direct variation
  ◊ Word problem on inverse variation

• Rational Functions (2 topics)
  ◊ Sketching the graph of a rational function: Constant over linear
  ◊ Sketching the graph of a rational function: Linear over linear

• Radical Expressions (26 topics)
  ◊ Radical Functions (2 topics)
    ◊ Domain of a square root function: Advanced
    ◊ Graphing a square root function
  ◊ Radical Expressions (15 topics)
    ◊ Square root of a rational perfect square
    ◊ Cube root of an integer
    ◊ Simplifying the square root of a whole number less than 100
    ◊ Square root of a perfect square monomial
    ◊ Simplifying a radical expression with an even exponent
    ◊ Simplifying a radical expression with two variables
    ◊ Simplifying a higher root of a whole number
    ◊ Simplifying a higher radical expression: Multivariate
    ◊ Square root addition or subtraction
    ◊ Simplifying a sum or difference of radical expressions: Multivariate
    ◊ Square root multiplication: Advanced
    ◊ Simplifying a product of radical expressions: Multivariate
    ◊ Simplifying a product involving square roots using the distributive property: Advanced
    ◊ Rationalizing the denominator of a radical expression
    ◊ Rationalizing the denominator of a radical expression using conjugates

• Higher Roots and Rational Exponents (5 topics)
  ◊ Converting between radical form and exponent form
  ◊ Rational exponents: Non–unit fraction exponent with a whole number base
  ◊ Rational exponents: Negative exponents and fractional bases
  ◊ Rational exponents: Products and quotients with negative exponents
  ◊ Rational exponents: Powers of powers with negative exponents

• Radical Equations (4 topics)
  ◊ Solving a radical equation that simplifies to a linear equation: One radical, basic
Solving a radical equation that simplifies to a linear equation: Two radicals
Solving a radical equation that simplifies to a quadratic equation: One radical
Solving an equation using the odd-root property: Problem type 1

• Exponentials and Logarithms (20 topics)
  ◦ Properties of Logarithms (7 topics)
    ◦ Converting between logarithmic and exponential equations
    ◦ Converting between natural logarithmic and exponential equations
    ◦ Evaluating a logarithmic expression
    ◦ Basic properties of logarithms
    ◦ Expanding a logarithmic expression: Problem type 1
    ◦ Writing an expression as a single logarithm
    ◦ Change of base for logarithms: Problem type 1
  ◦ Logarithmic and Exponential Equations (6 topics)
    ◦ Solving an equation of the form \( \log_b a = c \)
    ◦ Solving a multi-step equation involving a single logarithm
    ◦ Solving a multi-step equation involving natural logarithms
    ◦ Solving an equation involving logarithms on both sides: Problem type 2
    ◦ Solving an exponential equation by using logarithms: Exact answers in logarithmic form
    ◦ Solving exponential equations by using logarithms and natural logarithms: Decimal answers
  ◦ Applications with Exponential Equations (3 topics)
    ◦ Evaluating an exponential function that models a real-world situation
    ◦ Finding a final amount in a word problem on exponential growth or decay
    ◦ Finding the time to reach a limit in a word problem on exponential growth or decay
  ◦ Exponential and Logarithmic Functions (4 topics)
    ◦ Graphing an exponential function and its asymptote: \( f(x) = a(b)^x \)
    ◦ The graph, domain, and range of an exponential function
    ◦ The graph, domain, and range of a logarithmic function
    ◦ Translating the graph of a logarithmic or exponential function

• Geometry (20 topics)
  ◦ Perimeter, Area, and Volume (16 topics)
    ◦ Perimeter of a square or a rectangle
    ◦ Area of a square or a rectangle
    ◦ Area of a piecewise rectangular figure
    ◦ Finding the side length of a rectangle given its perimeter or area
    ◦ Finding the perimeter or area of a rectangle given one of these values
    ◦ Area of a parallelogram
    ◦ Area of a triangle
    ◦ Circumference and area of a circle
    ◦ Perimeter involving rectangles and circles
    ◦ Area involving inscribed figures
    ◦ Volume of a rectangular prism
    ◦ Volume of a cylinder
    ◦ Surface area of a cube or a rectangular prism
    ◦ Surface area of a cylinder: Exact answers in terms of \( \pi \)
    ◦ Similar polygons
    ◦ Indirect measurement
  ◦ Coordinate Geometry (4 topics)
    ◦ Pythagorean Theorem
    ◦ Distance between two points in the plane: Exact answers
    ◦ Graphing a circle given its equation in standard form
    ◦ Graphing a circle given its equation in general form

• Trigonometry (27 topics)
  ◦ Angles on the Unit Circle (5 topics)
Convert between degree and radian measure: Problem type 1
Sketching an angle in standard position
Reference angles: Problem type 1
Coterminal angles
Arc length and central angle measure

Right Triangle Trigonometry (7 topics)
- Sine, cosine, and tangent ratios: Variables for side lengths
- Using a trigonometric ratio to find a side length in a right triangle
- Using a trigonometric ratio to find an angle measure in a right triangle
- Finding trigonometric ratios given a right triangle
- Solving a right triangle
- Solving a triangle with the law of sines: Problem type 1
- Solving a triangle with the law of cosines

Unit Circle Trigonometry (7 topics)
- Finding coordinates on the unit circle for special angles
- Trigonometric functions and special angles: Problem type 1
- Trigonometric functions and special angles: Problem type 2
- Trigonometric functions and special angles: Problem type 3
- Finding values of trigonometric functions given information about an angle: Problem type 1
- Finding values of trigonometric functions given information about an angle: Problem type 2
- Finding values of trigonometric functions given information about an angle: Problem type 3

Graphing Trigonometric Functions (2 topics)
- Sketching the graph of \(y = a \sin(x+c)\) or \(y = a \cos(x+c)\)
- Sketching the graph of \(y = a \sin(bx)\) or \(y = a \cos(bx)\)

Inverse Trigonometric Functions (1 topic)
- Values of inverse trigonometric functions

Trigonometric Identities (1 topic)
- Simplifying trigonometric expressions

Trigonometric Equations (4 topics)
- Finding solutions in an interval for a basic equation involving sine or cosine
- Finding solutions in an interval for a basic tangent, cotangent, secant, or cosecant equation
- Finding solutions in an interval for a trigonometric equation using Pythagorean identities: Problem type 1
- Solving a basic trigonometric equation involving sine or cosine

Other Topics Available(*) (125 additional topics)
Real Numbers (8 topics)
- Fractional part of a circle
- Finding the percentage increase or decrease: Advanced
- Word problem on unit rates associated with ratios of whole numbers: Decimal answers
- Exponents and integers: Problem type 2
- Identifying numbers as integers or non-integers
- Identifying numbers as rational or irrational
- Properties of addition
- Properties of real numbers

Equations and Inequalities (7 topics)
- Solving an equation to find the value of an expression
- Solving a decimal word problem using a linear equation with the variable on both sides
- Solving a fraction word problem using a linear equation with the variable on both sides
- Writing a multi-step inequality for a real-world situation
- Solving a decimal word problem using a two-step linear inequality
- Solving a decimal word problem using a linear inequality with the variable on both sides
Solving an absolute value equation of the form |ax+b| = |cx+d|

Exponents and Polynomials (14 topics)
- Evaluating expressions with exponents of zero
- Ordering numbers with positive exponents
- Ordering numbers with negative exponents
- Multiplying and dividing numbers written in scientific notation
- Degree of a multivariate polynomial
- Simplifying a sum or difference of three univariate polynomials
- Factoring with repeated use of the difference of squares formula
- Factoring a sum or difference of two cubes
- Solving an equation that can be written in quadratic form: Problem type 1
- Solving a quadratic equation using the square root property: Exact answers, advanced
- Solving a quadratic equation by completing the square: Exact answers
- Discriminant of a quadratic equation
- Writing a quadratic equation given the roots and the leading coefficient
- Solving a quadratic inequality

Lines and Systems (7 topics)
- Determining whether given points lie on one, both, or neither of 2 lines given equations
- Writing the equations of vertical and horizontal lines through a given point
- Solving a 3x3 system of linear equations: Problem type 1
- Solving a 2x2 system of linear equations that is inconsistent or consistent dependent
- Solving a tax rate or interest rate problem using a system of linear equations
- Solving a word problem using a 3x3 system of linear equations: Problem type 1
- Graphing a system of two linear inequalities: Basic

Functions and Graphs (12 topics)
- Set-builder notation
- Finding inputs and outputs of a function from its graph
- Finding where a function is increasing, decreasing, or constant given the graph: Interval notation
- Domain and range from the graph of a piecewise function
- Graphing a parabola of the form y = ax² + bx + c: Rational coefficients
- Range of a quadratic function
- Classifying the graph of a function
- Graphing a piecewise-defined function: Problem type 1
- Determining the end behavior of the graph of a polynomial function
- Inferring properties of a polynomial function from its graph
- Horizontal line test
- Determining whether two functions are inverses of each other

Rational Expressions (13 topics)
- Ordering fractions with variables
- Dividing rational expressions involving quadratics with leading coefficients of 1
- Complex fraction made of sums involving rational expressions
- Solving a rational equation that simplifies to quadratic: Proportional form, advanced
- Partial fraction decomposition with distinct linear factors
- Partial fraction decomposition with repeated linear factors
- Partial fraction decomposition with an irreducible quadratic factor
- Writing an equation that models variation
- Word problem on combined variation
- Word problem on inverse proportions
- Word problem involving multiple rates
- Sketching the graph of a rational function: Quadratic over linear
- Graphing rational functions with holes

Radical Expressions (9 topics)
- Special products of radical expressions: Conjugates and squaring
◊ Rationalizing a denominator: Quotient involving higher radicals and monomials
◊ Using $i$ to rewrite square roots of negative numbers
◊ Simplifying a product and quotient involving square roots of negative numbers
◊ Adding or subtracting complex numbers
◊ Multiplying complex numbers
◊ Dividing complex numbers
◊ Simplifying a power of $i$
◊ Solving a quadratic equation with complex roots

♦ Exponentials and Logarithms (7 topics)
◊ Change of base for logarithms: Problem type 2
◊ Solving an equation involving logarithms on both sides: Problem type 1
◊ Solving an exponential equation by finding common bases: Linear and quadratic exponents
◊ Finding the initial or final amount in a word problem on exponential growth or decay
◊ Finding the rate or time in a word problem on continuous exponential growth or decay
◊ Graphing an exponential function and its asymptote: $f(x) = a(e)^{x-b} + c$
◊ Graphing a logarithmic function: Advanced

♦ Geometry (13 topics)
◊ Areas of rectangles with the same perimeter
◊ Finding a side length given the perimeter and side lengths with variables
◊ Finding the radius or the diameter of a circle given its circumference
◊ Circumference ratios
◊ Area involving rectangles and circles
◊ Word problem involving the area between two concentric circles
◊ Volume of a cone: Exact answers in terms of pi
◊ Volume of a sphere
◊ Word problem involving the rate of filling or emptying a cylinder
◊ Ratio of volumes
◊ Midpoint of a line segment in the plane
◊ Writing an equation of a circle given its center and a point on the circle
◊ Writing an equation of a circle given the endpoints of a diameter

♦ Trigonometry (20 topics)
◊ Area of a sector of a circle
◊ Using trigonometry to find a length in a word problem with one right triangle
◊ Using trigonometry to find angles of elevation or depression in a word problem
◊ Amplitude and period of sine and cosine functions
◊ Amplitude, period, and phase shift of sine and cosine functions
◊ Composition of a trigonometric function with its inverse trigonometric function: Problem type 1
◊ Composition of a trigonometric function with the inverse of another trigonometric function: Problem type 2
◊ Composition of a trigonometric function with the inverse of another trigonometric function: Problem type 3
◊ Using cofunction identities
◊ Sum and difference identities: Problem type 1
◊ Sum and difference identities: Problem type 2
◊ Double–angle identities: Problem type 1
◊ Double–angle identities: Problem type 2
◊ Product–to–sum and sum–to–product identities: Problem type 1
◊ Solving a basic trigonometric equation involving tangent, cotangent, secant, or cosecant
◊ Plotting a point in polar coordinates
◊ Converting rectangular coordinates to polar coordinates: Special angles
◊ Converting polar coordinates to rectangular coordinates
◊ Converting an equation written in rectangular form to one written in polar form
◊ Converting an equation written in polar form to one written in rectangular coordinates
Limits and Continuity (15 topics)
- Estimating a limit numerically
- Finding limits from a graph
- Finding limits for a piecewise-defined function
- Finding a limit by using the limit laws: Problem type 1
- Finding a limit by using the limit laws: Problem type 2
- Finding a limit by using the limit laws: Problem type 3
- Squeeze Theorem
- Determining points of discontinuity from a graph
- Determining a parameter to make a function continuous
- Limits at infinity and graphs
- Limits at infinity and rational functions
- Infinite limits and graphs
- Infinite limits and rational functions
- Finding a limit of a trigonometric function by using continuity
- Finding a limit by using special trigonometric limits

*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.