

Planned Course of Study

Algebra/Geometry III

Grades 11 - 12

Mathematics Department

Salisbury Township School District

1140 Salisbury Road

Allentown, PA 18103

Course Description

Prerequisite: Algebra/Geometry II or Algebra IB and Geometry

This course is the third course in a series of three courses designed for those students who 1) need a more concrete and integrated approach to the study of mathematics which allows for more practice and review of the standards and/or 2) have not demonstrated a high level of success on the 10th Grade Benchmark Test especially in the areas of algebraic concepts, geometry, and data analysis/probability.

This course is designed to continue the development of basic ideas and structures of algebra, geometry, and data analysis/probability. The concepts taught include: algebraic number sense including work with positive, negative, and rational exponents, advanced properties of triangles and triangle inequalities, properties of circles including their equations, the solving and graphing of systems of equations and inequalities, factoring and solving quadratic equations, making predictions using the line of best fit, and the use of combinations and permutations to solve problems.

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to simplify numeric expressions involving positive & negative exponents and square roots.</p>	<p>The student will simplify exponents both inside and outside parentheses in order of operations problems.</p> <p>The student will simplify radicals within numeric expressions.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.1.11. A</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Numb3rs TV Show</p>	

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to apply rules of exponents in order to simplify both numeric and algebraic expressions.</p>	<p>The student will add exponents when multiplying expressions with like bases.</p> <p>The student will subtract exponents when dividing expressions with like bases.</p> <p>The student will multiply exponents when raising a power to a power.</p> <p>The student will distribute the exponent to each term of an expression.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.1.11. A</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Numb3rs TV Show</p>	

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to solve distance, work, and mixture problems</p>	<p>The student will set up a table to represent the given information in the word problem.</p> <p>The student will use the information in the table to set up a single-variable equation.</p> <p>The student will solve the equation for the missing variable.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	
Resources/Materials			
<ul style="list-style-type: none"> • <u>Algebra I: Integrations, Applications, Connections</u> • <u>Algebra II: Integrations, Applications, Connections</u> • <u>Measuring Up to the PA Academic Standards: Final Level</u> 		<p><u>Geometry</u></p> <p><u>Informal Geometry</u></p> <p><u>PSSA Mathematics Coach: Grade 11</u></p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer’s Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Num3rs TV Show</p>	

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to describe & determine change in various contexts.</p>	<p>The student will be able to describe and use constant or varying rates of change in the context of problem solving.</p> <p>Given a formula or equation, the student will be able to determine how a change in one variable relates to a change in a second variable.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	
Resources/Materials			
<ul style="list-style-type: none"> • <u>Algebra I: Integrations, Applications, Connections</u> • <u>Algebra II: Integrations, Applications, Connections</u> • <u>Measuring Up to the PA Academic Standards: Final Level</u> 		<p><u>Geometry</u> <u>Informal Geometry</u> <u>PSSA Mathematics Coach: Grade 11</u></p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators Num3rs TV Show</p>	

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to identify an algebraic expression as a function or a relation.</p>	<p>The student will use the vertical line test on its graph to determine if an algebraic expression is a relation or a function.</p> <p>The student will use one-to-one mapping of its table to determine if an algebraic expression is a relation or a function.</p> <p>Given a table of function values, the student will match it with its appropriate graph.</p> <p>Given the graph of a function, the student will match it with its appropriate table.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.2.11. F</p> <p>2.8.11.Q</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Numb3rs TV Show</p>	

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to find the value of a given function.</p>	<p>Given the value of x, the student will use substitution to find the value of $f(x)$.</p> <p>Given the value of x, the student will use substitution to find the value of $f(g(x))$.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.8.11.Q</p>
Resources/Materials			
<ul style="list-style-type: none"> • <u>Algebra I: Integrations, Applications, Connections</u> • <u>Algebra II: Integrations, Applications, Connections</u> • <u>Measuring Up to the PA Academic Standards: Final Level</u> 		<p><u>Geometry</u> <u>Informal Geometry</u> <u>PSSA Mathematics Coach: Grade 11</u></p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer’s Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators Numb3rs TV Show</p>	

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will use various methods to solve linear inequalities in a plane</p>	<p>The student will solve a linear inequality by utilizing a graphing calculator.</p> <p>The student will solve a linear equality by graphing its corresponding linear equation and shading the appropriate region.</p> <p>The student will use linear inequalities to solve real-world application problems.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.2.11. F</p> <p>2.8.11.D</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Num3rs TV Show</p>	

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to solve compound inequalities and graphically represent their common solution.</p>	<p>The student will solve compound inequalities using the word “and” and graph the solution set on a number line.</p> <p>The student will solve compound inequalities using the word “or” and graph the solution set on a number line.</p> <p>The student will solve inequalities involving absolute value and graph the solution set on a number line.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.8.11.D</p>
Resources/Materials			
<ul style="list-style-type: none"> • <u>Algebra I: Integrations, Applications, Connections</u> • <u>Algebra II: Integrations, Applications, Connections</u> • <u>Measuring Up to the PA Academic Standards: Final Level</u> 		<p><u>Geometry</u> <u>Informal Geometry</u> <u>PSSA Mathematics Coach: Grade 11</u></p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer’s Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators Numb3rs TV Show</p>	

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Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will apply various techniques to solve systems of equations.</p>	<p>The student will graph both equations on their graphing calculator and trace to find their intersection point.</p> <p>The student will solve one equation for the given variable and substitute into the remaining equation to find their common solution.</p> <p>The student will add or subtract the given equations in order to eliminate one of the variables and discover a common solution.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.2.11. F</p> <p>2.8.11.D</p> <p>2.8.11.G</p> <p>2.8.11.H</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Numb3rs TV Show</p>	

Algebra/Geometry III
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Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to identify families of parabolas.</p>	<p>The student will be able to identify $y = x^2 + C$ as a translation of the parabola on the y-axis.</p> <p>The student will be able to identify $y = (x + C)^2$ as a translation of the parabola on the x-axis.</p> <p>The student will be able to identify $y = x^2$ as a parabola that opens upward and $y = -x^2$ as a parabola that opens downward.</p> <p>The student will be able to identify $y = Cx^2$, where $C > 1$, as a narrower parabola and $y = Dx^2$, where $D < 1$ as a wider parabola.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.2.11. F</p> <p>2.8.11. E</p> <p>2.9.11.A</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Num3rs TV Show</p>	

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will apply various techniques to solve a quadratic equation.</p>	<p>The student will graph a quadratic equation on their graphing calculator in order to find its roots.</p> <p>The student will factor a quadratic equation in order to find its roots.</p> <p>The student will apply the quadratic formula in order to find the roots of a quadratic equation.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.2.11. F</p> <p>2.8.11.N</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Numb3rs TV Show</p>	

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to add and subtract polynomial expressions.</p>	<p>The student will add & subtract polynomial expressions by combining like terms.</p> <p>The student will find the perimeter of a given polygon whose side lengths are represented as polynomial expressions.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.8.11.J</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<ul style="list-style-type: none"> Geometry Informal Geometry PSSA Mathematics Coach: Grade 11 	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<ul style="list-style-type: none"> Graphing Calculators Numb3rs TV Show 	

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to multiply and divide polynomial expressions.</p>	<p>The student will multiply a polynomial by a monomial by using the distributive property.</p> <p>The student will multiply two binomials by using the FOIL method.</p> <p>The student will multiply two polynomials by using the distributive property and combining like terms.</p> <p>The student will divide polynomials using both long & synthetic division.</p> <p>The student will find the area of a given triangle or quadrilateral whose base & height are represented as polynomial expressions.</p> <p>Given the area and either the base or height of a given triangle or quadrilateral, the student will use division of polynomials to find the missing dimension.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.8.11.J</p>
Resources/Materials			
<ul style="list-style-type: none"> • <u>Algebra I: Integrations, Applications, Connections</u> • <u>Algebra II: Integrations, Applications, Connections</u> • <u>Measuring Up to the PA Academic Standards: Final Level</u> 		<p><u>Geometry</u> <u>Informal Geometry</u> <u>PSSA Mathematics Coach: Grade 11</u></p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer’s Sketchpad 		<p>Graphing Calculators</p>	

- Math Related Web Sites (i.e. NCTM, TI)

Numb3rs TV Show

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
The student will be able to factor algebraic expressions.	<p>The student will factor an algebraic expression by finding the Greatest Common Factor (GCF).</p> <p>The student will factor an algebraic expression by rewriting as the product of two binomials.</p> <p>The student will factor an algebraic expression by using the difference of two squares.</p> <p>The student will factor an algebraic expression by using the sum & difference of two cubes.</p> <p>Given the area and either the base or height of a given triangle or quadrilateral, the student will use factoring of algebraic expressions to find the missing dimension.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	2.8.11.J
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		Geometry Informal Geometry PSSA Mathematics Coach: Grade 11	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad Math Related Web Sites (i.e. NCTM, TI)		Graphing Calculators Numb3rs TV Show	

Algebra/Geometry III
11 - 12
Full Year



Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will apply the side-angle relations in a triangle & the triangle inequality to various problem-solving situations.</p>	<p>The student will use the Isosceles Triangle Theorem to find the measures of given angles and the lengths of given segments.</p> <p>The student will use side-angle relations in a triangle to order to arrange both angle measures & side lengths from least to greatest & greatest to least.</p> <p>The student will use the Triangle Inequality to determine if given lengths can be the lengths of the sides of a triangle.</p> <p>The student will compare side lengths & angle measures of two triangles that have two pairs of congruent sides in order to make conclusions about given angles & side lengths.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.9.11.D</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry Informal Geometry PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
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***Algebra/Geometry III
11 - 12
Full Year***

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard

<p>The student will be able to identify the parts of a triangle (i.e. median, altitude, angle bisector, perpendicular bisector) and apply their properties to various problem-solving situations.</p>	<p>The student will construct and/or name altitudes & medians of triangles.</p> <p>The student will find segment lengths given the perpendicular bisector of one or more triangles.</p> <p>The student will be able to accurately identify the orthocenter, the centroid, the circumcenter, & the incenter of a triangle.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.9.11.A</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry Informal Geometry PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators Numb3rs TV Show</p>	

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard

<p>The student will be able to identify the parts of a circle (i.e. tangent, chord, secant, arc, inscribed & central angles) and apply their properties to various problem-solving situations.</p>	<p>Given the arc measure, the student will calculate both central & inscribed angle measures.</p> <p>Given the central or the inscribed angle, the student will calculate the measure of the given arc.</p> <p>The student will calculate the measure of angles and the length of segments given one or more tangents.</p> <p>The student will solve problems involving congruent chords and chords perpendicular to the diameter.</p> <p>The student will determine the measures of angles formed by chords, tangents, & secants.</p> <p>The student will determine the lengths of segments of chords, secants, and tangents.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.9.11.A</p> <p>2.9.11.F</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry</p> <p>Informal Geometry</p> <p>PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad • Math Related Web Sites (i.e. NCTM, TI) 		<p>Graphing Calculators</p> <p>Numb3rs TV Show</p>	

***Algebra/Geometry III
11 - 12
Full Year***

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard

<p>The student will use slope, distance, & midpoint to solve geometric problems.</p>	<p>The student will use slope, distance, & midpoint formulas to accurately describe a triangle in terms of its side lengths, altitudes, medians, & perpendicular bisectors.</p> <p>The student will use slope, distance, & midpoint formulas to identify a quadrilateral (parallelogram, rectangle, square, rhombus, and trapezoid).</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.8.11.J</p>
Resources/Materials			
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Additional Resources/Inter-disciplinary Relationships			
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Algebra/Geometry III
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Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard

<p>The student will discover how a change in one variable affects other variables.</p>	<p>The student will discover how a change in dimension affects the perimeter & area of two-dimensional figures.</p> <p>The student will discover how a change in dimension affects the surface area & volume of three-dimensional figures.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	
Resources/Materials			
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Additional Resources/Inter-disciplinary Relationships			
<ul style="list-style-type: none"> • Geometer's Sketchpad <p>Math Related Web Sites (i.e. NCTM, TI)</p>		<p>Graphing Calculators Numb3rs TV Show</p>	

Algebra/Geometry III
11 - 12
Full Year

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard

<p>The student will be able to determine the number of possible outcomes of an event.</p>	<p>The student will use the Fundamental Counting Principle to determine the number of possible outcomes of a given event.</p> <p>The student will use the combination formula to determine the number of groups of people or objects without regard to order.</p> <p>The student will use the permutation formula to determine the number of groups of people or objects that must be arranged in a particular order.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.7.8.A</p>
Resources/Materials			
<ul style="list-style-type: none"> • Algebra I: Integrations, Applications, Connections • Algebra II: Integrations, Applications, Connections • Measuring Up to the PA Academic Standards: Final Level 		<p>Geometry Informal Geometry PSSA Mathematics Coach: Grade 11</p>	
Additional Resources/Inter-disciplinary Relationships			
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Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard

<p>The student will be able to use a line of best fit to make predictions concerning graphed data.</p>	<p>Given a data table, the student will create a scatter plot of the information.</p> <p>Looking at the pattern of points, the student will draw a line that passes through two points.</p> <p>The student will use the slope formula & the slope intercept form of a line to find the prediction equation for the given data.</p> <p>The student will substitute a given value into the equation to make predictions concerning the data.</p> <p>Using a graphing calculator, the student will find the regression equation for a given table of values.</p>	<ul style="list-style-type: none"> ▪ Homework ▪ Classroom discussions ▪ Activities ▪ Quizzes ▪ Tests 	<p>2.2.11.C</p> <p>2.6.11.C</p> <p>2.8.11.M</p>
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Resources/Materials

- [Algebra I: Integrations, Applications, Connections](#)
- [Algebra II: Integrations, Applications, Connections](#)
- [Measuring Up to the PA Academic Standards: Final Level](#)

- [Geometry](#)
- [Informal Geometry](#)
- [PSSA Mathematics Coach: Grade 11](#)

Additional Resources/Inter-disciplinary Relationships

- Geometer's Sketchpad
- Math Related Web Sites (i.e. NCTM, TI)

Graphing Calculators
Numb3rs TV Show