

Pre-Algebra Grade 7 Curriculum

Unit 1 Numbers and Operations

Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
19 Days	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	Why is it useful to write numbers in different ways?	Compare real numbers	<p>Students should be able to identify and give examples of Natural numbers, Whole numbers, Integers, Rational numbers and Irrational numbers.</p> <p>Students should be able to compare numbers in the real number system.</p> <p>Students should be able to solve equations by finding square roots or cube roots,</p>	<p>The Real Number System</p> <p>Glencoe Math Accelerated (2014) Section 4-7 Pages 174-179</p>	<p>Irrational number</p> <p>Real number</p>	<p>CC.2.1.8.E.1 Distinguish between rational and irrational numbers using their properties.</p> <p>CC.2.1.8.E.4 Estimate irrational numbers by comparing them to rational numbers.</p> <p>M08.A-N.1.1.1 Determine whether a number is rational or irrational. For rational numbers, show that the decimal expansions terminates or repeats.(limit repeating decimals to thousandths)</p> <p>M08.A-N.1.1.2 Convert terminating or repeating decimals to rational numbers(limit decimals to thousandths)</p> <p>M08.A-N.1.1.3 Estimate the value of irrational numbers without a calculator (limit whole number radicands to less than 144)</p> <p>M08.A-N. 1.1.4 Use rational approximations of irrational numbers to compare and order irrational numbers.</p> <p>M08.A-N.1.1.5 Locate/identify rational and irrational numbers at their approximate locations on a</p>

							number line.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	What happens when you add, subtract, multiply and divide integers?	Operations on Integers	<p>Students should be able to add two integers.</p> <p>Students should be able to add more than two integers.</p> <p>Students should be able to subtract integers.</p> <p>Students should be able to find distance on a number line.</p> <p>Students should be able to multiply integers.</p> <p>Students should be able to simplify algebraic expressions.</p> <p>Students should be able to divide integers.</p> <p>Students should be able to find the mean (average) of a set of data.</p>	<p>Adding, Subtracting, Multiplying and Dividing Integers</p> <p>Glencoe Math Accelerated (2014) Section 2-2 Pages 55-60</p> <p>Glencoe Math Accelerated (2014) Section 2-3 Pages 63-67</p> <p>Glencoe Math Accelerated (2014) Section 2-4 Pages 71-76</p> <p>Glencoe Math Accelerated (2014) Section 2-5 Pages 77-82</p>	<p>Additive inverse</p> <p>Inductive reasoning</p> <p>Conjecture</p>	<p>CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p> <p>CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.</p> <p>M07.A-N.1.1.2 Represent addition and subtraction on a horizontal number line.</p> <p>M07.A-N.1.1.1 Apply properties of operations to add and subtract rational numbers, including real-world contexts.</p> <p>M07.B-E.2.1.1 Apply properties of operations with numbers in any form; convert between forms as appropriate.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	What happens when you add, subtract, multiply and divide integers?	Operations on decimals	<p>Students should be able to add and subtract positive and negative decimals.</p> <p>Students should be able to multiply and divide positive and negative decimals.</p>	Decimal Operations		<p>CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p> <p>CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.</p> <p>M07.A-N.1.1.2 Represent addition and subtraction on a horizontal number line.</p> <p>M07.A-N.1.1.1 Apply properties of operations to add and subtract rational numbers, including real-world contexts.</p>

							M07.B-E.2.1.1 Apply properties of operations with numbers in any form; convert between forms as appropriate.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	What happens when you add, subtract multiply and divide rational numbers?	Fractions and Decimals	<p>Students should be able to write fractions as terminating or repeating decimals.</p> <p>Students should be able to compare fractions, percent's decimals.</p>	Fractions, Decimals and Percents Glencoe Math Accelerated (2014) Section 3-1 Pages 94-100	<p>Repeating decimal</p> <p>Terminating decimal</p> <p>Bar notation</p>	<p>CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p> <p>CC.2.2.7.B.3 Model real-world and mathematical problems by using numerical, algebraic, and/or graphical representations.</p> <p>CC.2.1.8.E.1 Distinguish between rational and irrational number using their properties.</p> <p>M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real world contexts; demonstrate that the decimal form of a rational terminates or eventually repeats.</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms when appropriate.</p> <p>M08.A-N.1.1.1 Determine whether a number is rational or irrational. For rational numbers, show that the decimal expansion terminates or repeats (limit repeating decimals to thousandths.)</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing	What happens when you add, subtract multiply and divide rational numbers?	Rational Numbers	<p>Students should be able to write rational numbers as fractions.</p> <p>Students should be able to classify rational numbers.</p>	Rational Numbers Glencoe Math Accelerated (2014) Section 3-2 Pages 101-106	Rational Numbers	<p>CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p> <p>CC.2.2.7.B.3 Model real-world and mathematical problems by using numerical, algebraic, and/or graphical representations.</p>

	equivalent forms of expressions and solving equations and inequalities						<p>CC.2.1.8.E.1 Distinguish between rational and irrational number using their properties.</p> <p>M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real world contexts; demonstrate that the decimal form of a rational terminates or eventually repeats.</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms when appropriate.</p> <p>M08.A-N.1.1.1 Determine whether a number is rational or irrational. For rational numbers, show that the decimal expansion terminates or repeats (limit repeating decimals to thousandths.)</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	What happens when you add, subtract multiply and divide rational numbers?	Operations on Rational Numbers	<p>Students should be able to multiply positive and negative fractions.</p> <p>Students should be able to evaluate algebraic expressions with fractions.</p> <p>Students should be able to divide positive and negative fractions using multiplicative inverses,</p> <p>Students should be able to add rational numbers with common denominators.</p> <p>Students should be able to subtract rational numbers with common denominators.</p> <p>Students should be able</p>	<p>Rational Number Operations</p> <p>Glencoe Math Accelerated (2014) Section 3-3 Pages 107-112</p> <p>Glencoe Math Accelerated (2014) Section 3-4 Pages 114-119</p> <p>Glencoe Math Accelerated (2014) Section 3-5 Pages 120-125</p> <p>Glencoe Math Accelerated (2014) Section 3-6 Pages 126-131</p>	<p>Multiplicative Inverse</p> <p>Reciprocal</p> <p>Like fractions</p> <p>Unlike Fractions</p>	<p>CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p> <p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.</p> <p>M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real-world contexts; demonstrate that the decimal form of a number terminates and repeats.</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate.</p>

Unit 2 Expressions

Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
21 Days	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can one use numbers and symbols to represent mathematical ideas?	The Four-Step Plan	Students should be able to use the Four-Step Plan to solve problems. Students should be able to solve multi-step problems.	A Plan for Problem Solving Glencoe Math Accelerated (2014) Section 1-1 Pages 2-5	Four-Step Plan	CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connection numerical, algebraic and/or graphical representations. M07.B-E.2.3.1 Determine the reasonableness of answer(s) or interpret the solutions(s) in the context of the problem.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can one use numbers and symbols to represent mathematical ideas?	Expressions Order of Operations	Students should be able to translate phrases into expressions. Students should be able to us the order of operations to evaluate expressions.	Words and Expressions Glencoe Math Accelerated (2014) Section 1-2 Pages 6-12	Numerical expression Evaluate Order of operations	CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers. M07.A-N.1.1.1 Apply properties of operations to ad and subtract rational numbers, including real-world contexts. M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real world contexts; demonstrate that the decimal form of a rational number terminates or eventually repeats.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and	How can one use numbers and symbols to represent mathematical ideas?	Expressions	Students should be able to translate verbal expressions into algebraic expressions. Students should be able to evaluate expressions containing variables.	Variables and Expressions Glencoe Math Accelerated (2014) Section 1-3 Pages 13-18	Algebra Variable Algebraic expressions Defining a variable	CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers. CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connection numerical,

	structures in many equivalent forms.					Substitution Property of equality	<p>algebraic and/or graphical representations.</p> <p>M07.A-N.1.1.1 Apply properties of operations to add and subtract rational numbers, including real-world contexts.</p> <p>M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real world contexts; demonstrate that the decimal form of a rational number terminates or eventually repeats.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p>
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can one use numbers and symbols to represent mathematical ideas?	Properties of Addition and Multiplication	<p>Students should be able to identify and use properties of addition and multiplication.</p> <p>Students should be able to use properties to simplify algebraic expressions.</p>	<p>Properties of Numbers</p> <p>Glencoe Math Accelerated (2014) Section 1-4 Pages 19-24</p>	<p>Properties</p> <p>Commutative Property</p> <p>Associative Property</p> <p>Additive Identity</p> <p>Multiplicative Identity</p> <p>Multiplication Property of Zero</p> <p>Substitution Property of Equality</p> <p>Counter Example</p> <p>Simplify</p> <p>Deductive Reasoning</p>	<p>CC.2.2.7.B.1 Apply properties of operations to generate equivalent expressions</p> <p>M07.B-E.1.1.1 Apply properties of operations to add, subtract, factor and expand linear expressions with rational coefficients.</p>

Unit 3 Equations

Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
17 Days	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step equations?	Expressions, Equations and Inequalities	<p>Students should be able to solve one step equations by adding and subtracting.</p> <p>Students should be able to solve one step equations by multiplying and dividing.</p> <p>Students should be able to write and solve one step equations given a sentence.</p>	One Step Equations	<p>Solution</p> <p>Inverse operations</p> <p>Equivalent equations.</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations.</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step equations?	Expressions, Equations and Inequalities	<p>Students will be able to solve equations by using the distributive property of equality.</p> <p>Students will be able to solve equations using the Multiplication property of equality.</p>	<p>Solving Equations with Rational Coefficients</p> <p>Glencoe Math Accelerated (2014) Section 8-1 Pages 324-329</p>	<p>Solution</p> <p>Inverse operations</p> <p>Equivalent equations.</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations.</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients,</p>

							including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step	Expressions, Equations and Inequalities	<p>Students should be able to solve two-step equations.</p> <p>Students should be able to solve real-world problems involving two-step equations.</p> <p>Students should be able to solve equations of the form $p(x + q) = r$.</p> <p>Students should be able to solve verbal problems by writing and solving equations of the form $p(x + q) = r$.</p>	<p>Solving Two-Step Equations</p> <p>Glencoe Math Accelerated (2014) Section 8-2 Pages 333-338</p> <p>Glencoe Math Accelerated (2014) Section 8-4 Pages 347-351</p>	Two-Step Equations	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step	Expressions, Equations and Inequalities	<p>Students should be able to solve problems using the distance formula.</p> <p>Students should be able to find the missing sides of a rectangle using perimeter and area.</p>	Solving Formulas	<p>Formula</p> <p>Distance formula</p> <p>Perimeter</p> <p>Area</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.</p>
	There are some	How are equations and	Expressions,	Students should be able	Equations with Variables		CC.2.2.7.B.3 Model and solve real

	mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	inequalities used to describe and solve multi-step	Equations and Inequalities	to solve equations with variables on both sides. Students should be able to solve equations that involve grouping symbols.	on Each Sides Glencoe Math Accelerated (2014) Section 8-5 Pages 356-360		world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations. M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers. M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.
	Review Common Assessment Unit 3 Equations 1 Day						
	Test Common Assessment Unit 3 Equations 1 Day						
Unit 4 Monomials and Exponents							
Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
18 Days	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and	How can we show that algebraic properties and processes are extensions of arithmetic properties and processes, and how can we use algebraic properties and processes to solve problems?	Algebraic properties and processes	Use algebraic properties and processes in mathematical situations and apply them to solve real world problems. Student should be able to use the rules of	Factors and Monomials Glencoe Algebra 1 (old) Section 9-1 Glencoe-Algebra 1(2014) Section 8-5 (pgs 494 -498)	Monomials	Prerequisite for: 2.1.A1.E-Apply the concepts of prime and composite monomials to determine GCFs (Greatest Common Factor) and LCMs (Least Common Multiple) of monomials. 2.8.A1.B-Evaluate and simplify not understood algebraic expressions

	structures in many equivalent forms			<p>divisibility to find factors.</p> <p>Students should be able to determine if an expression is a monomial.</p>	<p>Glencoe-Algebra 1(2014) Section 7-1 (pgs 391)</p> <p>Pearson-Algebra 1 Section 8-2 (pgs 492-496) Skills Handbook pg 798</p>		<p>and solve and graph linear equations and inequalities.</p> <p>A1.1.1.2-Apply number theory concepts to show relationships between real numbers in problem solving settings.</p> <p>A1.1.1.2.1-Find the Greatest Common Factor (GCF) and/or the Least Common Multiple (LCM) for sets of monomials.</p>
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	Why is it useful to write numbers in different ways?	Powers and Exponents	<p>Students should be able to write expressions using exponents.</p> <p>Students should be able to evaluate expressions containing exponents</p>	<p>Powers and Exponents</p> <p>Glencoe Math Accelerated (2014) Section 4-1 Pages 136-140</p>	<p>Exponent</p> <p>Power</p> <p>Base</p>	<p>CC.2.2.8.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions.</p> <p>M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with the final answers expressed in exponential form with positive exponents.</p>
	There are some mathematical relationships that are always true and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	How can we show that algebraic properties and processes are extensions of arithmetic properties and processes, and how can we use algebraic properties and processes to solve problems?	Algebraic properties and processes	<p>Use algebraic properties and processes in mathematical situations and apply them to solve real world problems.</p> <p>Students should be able to factor monomials into primes</p> <p>Students should be able to identify prime and composite numbers.</p>	<p>Prime Factorization</p> <p>Glencoe Algebra 1 (old) Section 9-1</p> <p>Glencoe-Algebra 1(2010) Section 8-1(pgs 471 -474) Section 8-2 (pgs.476-482)</p> <p>Pearson-Algebra 1 Section 8-2 (pgs 492-496) Skills handbook pg 798</p>	Factored form	<p>CC.2.2.7.B.1 Apply properties of operations to generate equivalent expressions.</p> <p>M07.B-E.1.1.1 Apply properties of operations to add, subtract, factor, and expand linear expressions with rational numbers.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are	How can you use numbers and symbols to represent mathematical ideas?	Expressions, Equations and Inequalities	<p>Students should be able to find the greatest common factor of two monomials.</p> <p>Students should be able to use properties to factor linear expressions.</p>	<p>Factoring Linear Expressions</p> <p>Glencoe Math Accelerated (2014) Section 7-5 Pages 316-320</p>	<p>Factor</p> <p>Factored Form</p>	<p>CC.2.2.7.B.1 Apply properties of operations to generate equivalent expressions.</p> <p>M07.B-E.1.1.1 Apply properties of operations to add, subtract, factor, and expand linear expressions with rational numbers.</p>

	useful for writing equivalent forms of expressions and solving equations and inequalities						
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	What happens when you add, subtract multiply and divide rational numbers?	Operations on Rational Numbers	Students should be able to simplify fractions and algebraic fractions using factoring.	Simplify Algebraic Fractions	Algebraic Fractions	<p>CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p> <p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.</p> <p>M07.A-N.1.1.1 Apply properties of operations to add and subtract rational numbers, including real-world contexts.</p> <p>M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real-world contexts; demonstrate that the decimal form of a number terminates and repeats.</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate.</p>
	Review for Quiz Unit 4 1 Day						
	Quiz Unit 4 1 Day						
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	Why is it useful to write numbers in different ways?	Operations with Monomials	<p>Students should be able to multiply and divide monomials.</p> <p>Students should be able to simplify real number expressions by multiplying and dividing monomials</p>	<p>Multiplying and Dividing Monomials</p> <p>Glencoe Math Accelerated (2014) Section 4-3 Pages 147-152</p>	Monomial	<p>CC.2.2.8.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions.</p> <p>M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with the final answers expressed in exponential form with positive</p>

							exponents.
	There are some mathematical relationships that are always true and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	How can we show that algebraic properties and processes are extensions of arithmetic properties and processes, and how can we use algebraic properties and processes to solve problems?	Algebraic properties and processes	Use algebraic properties and processes in mathematical situations and apply them to solve real world problems. Students should be able to find the Least Common Multiple r of two monomials.	Least Common Multiple Glencoe-Algebra 1(2014) Section 11-6 (pgs 712-719) Pearson-Algebra 1 Section 8-2 (pgs 492-496) Skills Handbook 799	Greatest Common Factor	Prerequisite for: 2.1.A1.E-Apply the concepts of prime and composite monomials to determine GCFs (Greatest Common Factor) and LCMs (Least Common Multiple) of monomials. 2.8.A1.B-Evaluate and simplify not understood algebraic expressions and solve and graph linear equations and inequalities. A1.1.1.2-Apply number theory concepts to show relationships between real numbers in problem solving settings. A1.1.1.2.1-Find the Greatest Common Factor (GCF) and/or the Least Common Multiple (LCM) for sets of monomials.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	Why is it useful to write numbers in different ways?	Powers and Exponents	Students should be able to write expressions using negative exponents Students should be able to evaluate numerical expressions containing negative exponents.	Negative Exponents Glencoe Math Accelerated (2014) Section 4-2 Pages 141-146	Negative exponents	CC.2.2.8.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions. M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with the final answers expressed in exponential form with positive exponents.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	Why is it useful to write numbers in different ways?	Scientific Notation	Students should be able to express numbers in standard form and in scientific notation. Students should be able to compare and order numbers written in scientific notation. Students should be able to use scientific notation to write large and small numbers.	Scientific Notation Glencoe Math Accelerated (2014) Section 4-4 Pages 153-158	Standard Form Scientific Notation	CC.2.2.8.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions. M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with the final answers expressed in exponential form with positive exponents. M08.B-E.1.1.3 Estimate very large and very small quantities by using

							<p>numbers expressed in the form of a single digit times an integer power of 10 and express how many times larger or smaller one number is to another.</p> <p>M08.B-E.1.1.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Express answers in scientific notation and choose units of appropriate size for measurements of very large or very small quantities. Interpret scientific notation that has been generated by technology.</p>
	<p>Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.</p>	<p>Why is it useful to write numbers in different ways?</p>	<p>Scientific Notation</p>	<p>Students should be able to multiply and divide numbers in scientific notation.</p> <p>Students should be able to add and subtract numbers in scientific notation.</p> <p>Students should be able to compute with numbers in Scientific Notation.</p>	<p>Compute with Scientific Notation</p> <p>Glencoe Math Accelerated (2014) Section 4-5 Pages 160-165</p>	<p>Standard Form</p> <p>Scientific Notation</p>	<p>CC.2.2.8.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions.</p> <p>M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with the final answers expressed in exponential form with positive exponents.</p> <p>CC.2.2.8.1.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions.</p> <p>M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with the final answers expressed in exponential form with positive exponents.</p> <p>M08.B-E.1.1.3 Estimate very large and very small quantities by using numbers expressed in the form of a single digit times an integer power of 10 and express how many times larger or smaller one number is to</p>

							another. M08.B-E.1.1.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Express answers in scientific notation and choose units of appropriate size for measurements of very large or very small quantities. Interpret scientific notation that has been generated by technology.
	Review Unit 4 Monomials and Exponents Assessment (1 Day)						
	Unit 4 Monomials and Exponents Assessment (1 Day)						
Unit 5 Ratios and Proportions							
Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
20 Days	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms. Similarity relationships between objects are a form of	How can you identify and represent proportional relationships?	Ratio, Rate, and Proportional Relationships	Students should be able to convert rates using dimensional analysis. Students should be able to convert customary units of capacity. Students should be able to convert customary units of distance, time, weight, and capacity that are two levels apart. Students should be able	Converting Rates Glencoe Math Accelerated (2014) Section 5-4 Pages 200-205	Dimensional analysis	CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems. M07.A-R.1.1.1 Compute Unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like and unlike units. M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems.

	proportional relationships. Congruence describes a special similarity relationship between objects and is a form of equivalence			to convert metric units of distance, capacity, and mass. Students should be able to convert units of measure between derived units and to solve problems			
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms. Similarity relationships between objects are a form of proportional relationships. Congruence describes a special similarity relationship between objects and is a form of equivalence.	How can you identify and represent proportional relationships?	Ratio, Rate, and Proportional Relationships	Students should be able to write ratios as fractions in simplest form. Student should be able to simplify ratios involving measurement. Students should be able to find unit rates. Students should be able to compare and use unit rates to solve problems. Students should be able to simplify complex fractions Students should be able to find unit rates.	Ratios, Unit Rates and Complex Fractions Glencoe Math Accelerated (2014) Section 5-1 Pages 184-188 Glencoe Math Accelerated (2014) Section 5-2 Pages 189-193 Glencoe Math Accelerated (2014) Section 5-3 Pages 194-199	Ratio Rate Unit rate Complex fractions	CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems. M07.A-R.1.1.1 Compute unit rates with ratios of fractions, including ratios of lengths, areas and other quantities measured in like and different units.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms. Similarity relationships between objects	How can you identify and represent proportional relationships?	Ratio, Rate, and Proportional Relationships	Students should be able to identify proportional and nonproportional relationships in tables and graphs. Students should be able to describe proportional relationships using an equation. Students should be able to use cross products to solve proportions.	Proportional and Nonproportional Relationships Glencoe Math Accelerated (2014) Section 5-5 Pages 206-210 Glencoe Math Accelerated (2014) Section 5-7 Pages 218-223	Proportional Constant of proportionality Nonproportional Proportion Cross Products	CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems. M07.A-R.1.1.2 Determine whether two quantities are proportionally related (e.g., by testing for equivalent ratios in a table, graphing on a coordinate plane and observing whether the graph is a straight line through the origin. M07.A-R.1.1.3 Identify the constant

	are a form of proportional relationships. Congruence describes a special similarity relationship between objects and is a form of equivalence			Students should be able to use the constant of proportionality to solve proportions.			of proportionality (unit rate) in tables, graphs, equations and diagrams, and verbal descriptions of proportional relationships. M07.A-R.1.1.4 Represent proportional relationships by equations. (ex. If the cost t is proportional to the number n of items purchased at a constant price p , the relationship between the total cost and the number of items can be expressed as $t = pn$)
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms. Similarity relationships between objects are a form of proportional relationships. Congruence describes a special similarity relationship between objects and is a form of equivalence.	How can you identify and represent proportional relationships?	Ratio, Rate, and Proportional Relationships	Students should be able to use scale drawings. Student should be able to construct scale drawings. Students should be able to solve problems involving scale drawings	Scale Drawings and Models Glencoe Math Accelerated (2014) Section 5-8 Pages 224-229	Scale drawing Scale model Scale Scale factor	CC.2.3.7.A.2 Visualize and represent geometric figures and describe the relationship between them. M07.C-G.1.1.1 Solve problems involving scale drawings of geometric figures, including finding length and area.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can you identify and represent proportional relationships?	Ratio, Rate, and Proportional Relationships	Students should be able to convert rates using dimensional analysis. Students should be able to convert between systems of measurement. Students should be able	Dimensional Analysis Glencoe Math Accelerated (2014) Section 5-4 Pages 200-205	Dimensional analysis	CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems. M07.A-R.1.1.1 Compute Unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like and unlike units.

	Similarity relationships between objects are a form of proportional relationships. Congruence describes a special similarity relationship between objects and is a form of equivalence			to convert units of measure between derived units and to solve problems			M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems.
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can you use proportional relationships to solve real-world percent problems?	Proportionality and Linear Relationships	<p>Students will be able to use the percent proportion to solve problems.</p> <p>Students will be able to apply the percent proportion to real-world problems.</p>	<p>Using the Percent Proportion</p> <p>Glencoe Math Accelerated (2014) Section 6-1 Pages 250-255</p>	Percent Proportion	<p>CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems</p> <p>CC.2.2.7.B.3 Model real world and mathematical problems by using and connection numerical, algebraic, and/or graphical representations.</p> <p>M07.A-R.1.1.4 Represent proportional relationships by equations. (ex. If the cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expresses as $t = pn$)</p> <p>M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems. (ex. Simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease)</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate. (Ex. If a woman making \$25 an hour gets</p>

							a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or 42.50, for a new salary of \$27.50 an hour (or $1.1 \times \$25 = \27.50)
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can you use proportional relationships to solve real-world percent problems?	Proportionality and Linear Relationships	<p>Students will be able to solve percent problems using percent equations.</p> <p>Students will be able to solve real-world problems involving taxes and tips..</p>	<p>Using the Percent Equation</p> <p>Glencoe Math Accelerated (2014) Section 6-3 Pages 261-266</p>	Percent Equation	<p>CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems</p> <p>CC.2.2.7.B.3 Model real world and mathematical problems by using and connection numerical, algebraic, and/or graphical representations.</p> <p>M07.A-R.1.1.4 Represent proportional relationships by equations. (ex. If the cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expresses as $t = pn$)</p> <p>M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems. (ex. Simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease)</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate. (Ex. If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or 42.50, for a new salary of \$27.50 an hour (or $1.1 \times \\$25 = \\27.50)</p>
	Numbers, measures, expressions,	How can you use proportional relationships to solve real-world percent	Proportionality and Linear Relationships	Students will be able to some simple and compound interest	Simple and Compound Interest	<p>Interest</p> <p>Simple interest</p>	CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical

	equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	problems?		<p>problems.</p> <p>Students will be able to apply the simple interest equation to real-world problems.</p> <p>Students will be able to solve compound interest problems.</p>	Glencoe Math Accelerated (2014) Section 6-6 Pages 281-285	<p>Principle</p> <p>Compound interest</p>	<p>problems</p> <p>CC.2.2.7.B.3 Model real world and mathematical problems by using and connection numerical, algebraic, and/or graphical representations.</p> <p>M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems. (ex. Simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease)</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate. (Ex. If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or 42.50, for a new salary of \$27.50 an hour (or $1.1 \times \\$25 = \\27.50))</p>
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can you use proportional relationships to solve real-world percent problems?	Proportionality and Linear Relationships	Students will be able to solve real-world problems involving discount and markup.	Discount and Markup Glencoe Math Accelerated (2014) Section 6-5 Pages 275-280	<p>Markup</p> <p>Selling price</p> <p>Discount</p>	<p>CC.2.1.7.D.1 Analyze proportional relationships and use them to solve real-world and mathematical problems</p> <p>CC.2.2.7.B.3 Model real world and mathematical problems by using and connection numerical, algebraic, and/or graphical representations.</p> <p>M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems. (ex. Simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease)</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with</p>

							<p>numbers in any form; convert between forms as appropriate. (Ex. If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or 42.50, for a new salary of \$27.50 an hour (or $1.1 \times \\$25 = \\27.50))</p>
	<p>Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.</p>	<p>How can you use proportional relationships to solve real-world percent problems?</p>	<p>Proportionality and Linear Relationships</p>	<p>Students should be able to find the percent of change.</p> <p>Students should be able to find percent of increase or decrease.</p> <p>Students should be able to find percent error.</p>	<p>Percent of Change</p> <p>Glencoe Math Accelerated (2014) Section 6-4 Pages 270-274</p>	<p>Percent of change</p> <p>Percent of increase</p> <p>Percent of decrease</p> <p>Percent error</p>	<p>CC.2.1.7.D.1 1 Analyze proportional relationships and use them to solve real-world and mathematical problems</p> <p>CC.2.2.7.B.3 Model real world and mathematical problems by using and connection numerical, algebraic, and/or graphical representations.</p> <p>M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems. (ex. Simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease)</p> <p>M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate. (Ex. If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or 42.50, for a new salary of \$27.50 an hour (or $1.1 \times \\$25 = \\27.50))</p>
	<p>Review Unit 5 Ratio and Proportions Assessment (2 Days)</p>						
	<p>Unit 5 Ratio and Proportions Assessment (1 Day)</p>						

Unit 6 Equations and Inequalities

Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
17 Days	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step	Expressions, Equations and Inequalities	Students will be able to write inequalities. Students will be able to graph inequalities on a number line.	Inequalities Glencoe Math Accelerated (2014) Section 8-6 Pages 361-366		CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations M07.B-E.2.2.2 Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q and r are specific rational numbers and graph the solution set of the inequality.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step	Expressions, Equations and Inequalities	Students should be able to solve inequalities by using the Addition Property of Inequality and Subtraction Property of Inequality. Students will be able to solve inequalities by multiplying or dividing by a positive or a negative number.	Solving Inequalities Glencoe Math Accelerated (2014) Section 8-7 Pages 367-373		CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations M07.B-E.2.2.2 Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q and r are specific rational numbers and graph the solution set of the inequality.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing	How are equations and inequalities used to describe and solve multi-step	Expressions, Equations and Inequalities	Students should be able to solve multi-step equations. Students should be able to solve equations involving parentheses and combining like terms.	Solving Multi-Step Equations Glencoe Math Accelerated (2014) Section 8-8 Pages 374-379	Null set Empty set Identity	CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.

	equivalent forms of expressions and solving equations and inequalities						<p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M07.B-E.2.2.2 Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q and r are specific rational numbers and graph the solution set of the inequality.</p> <p>M08.B-E.3.1.1 Write and Identify linear equations in one variable with one solution, infinitely many solutions, or no solution. Show which of these possibilities is the case by successfully transforming the given equation into simpler forms until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers)</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities	How are equations and inequalities used to describe and solve multi-step	Expressions, Equations and Inequalities	<p>Students should be able to solve multi-step Inequalities.</p> <p>Students should be able to solve inequalities that involve more than one operation.</p> <p>Students should be able to write an inequality to solve problems.</p>	<p>Solving Multi-Step Inequalities</p> <p>Glencoe Math Accelerated (2014) Section 8-8 Pages 374-379</p>	<p>Null set</p> <p>Empty set</p> <p>Identity</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M07.B-E.2.2.2 Solve word problems leading to inequalities of the form</p>

							<p>$px + q > r$ or $px + q < r$, where p, q and r are specific rational numbers and graph the solution set of the inequality.</p> <p>M08.B-E.3.1.1 Write and Identify linear equations in one variable with one solution, infinitely many solutions, or no solution. Show which of these possibilities is the case by successfully transforming the given equation into simpler forms until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers)</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.</p>
	<p>There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities</p>	<p>How are equations and inequalities used to describe and solve multi-step</p>	<p>Expressions, Equations and Inequalities</p>	<p>Students should be able to solve multi-step equations and Inequalities.</p> <p>Students should be able to solve equations that have no solutions or infinitely many solutions.</p>	<p>Special Equations and inequalities</p> <p>Glencoe Math Accelerated (2014) Section 8-8 Pages 374-379</p>	<p>Null set</p> <p>Empty set</p> <p>Identity</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M07.B-E.2.2.2 Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q and r are specific rational numbers and graph the solution set of the inequality.</p> <p>M08.B-E.3.1.1 Write and Identify linear equations in one variable with</p>

							<p>one solution, infinitely many solutions, or no solution. Show which of these possibilities is the case by successfully transforming the given equation into simpler forms until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers)</p> <p>M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.</p>
	<p>There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities</p>	<p>How are equations and inequalities used to describe and solve multi-step</p>	<p>Expressions, Equations and Inequalities</p>	<p>Students should be able to write an equation to solve problems involving perimeter and area.</p>	<p>Area and Perimeter Word Problems</p>	<p>Area</p> <p>Perimeter</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations</p> <p>CC.2.2.8.B.3 Analyze and solve linear equations and pair of simultaneous linear equations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p> <p>M07.B-E.2.2.2 Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q and r are specific rational numbers and graph the solution set of the inequality.</p> <p>M08.B-E.3.1.1 Write and Identify linear equations in one variable with one solution, infinitely many solutions, or no solution. Show which of these possibilities is the case by successfully transforming the given equation into simpler forms until an equivalent equation</p>

							of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers) M08.B-E.3.1.2 Solve linear equations that have rational coefficients, including equations whose solutions require expanding expressions using the Distributive Property and collecting like terms.
	Review Common Assessment Unit 6 Equations and Inequalities 2 Days						
	Test Common Assessment Unit 6 Equations and Inequalities 1 Day						
Unit 7 Relations and Graphing							
Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
26 days	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can one use numbers and symbols to represent mathematical ideas?	Relations	Students should be able to use ordered pairs to locate points. Students should be able to locate points to represent relations.	Orders Pairs and Relations Glencoe Math Accelerated (2014) Section 1-6 Pages 31-36	Coordinate system Coordinate plane x-axis y-axis ordered pairs x-coordinate y-coordinate graph relation domain	CC.2.1.7.D.1 Analyze proportional relationships and use them to model and solve real world and mathematical problems CC.2.2.8.B.2 Understand the connections between proportional relationships, lines and linear equations. M07.A-R. 1.1.2 Determine whether two quantities are proportionally related (e.g., by testing for equivalent ratios in a table, graphing on a coordinate plane and observing whether the graph is a straight line through the origin)

						range	<p>M07.A-R.1.1.3 Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p> <p>M07.A-R.1.1.5 Explain what a point (x,y) on the graph of a proportional situation, with special attention to the points (0,0) and (1,r), where r is the unit rate.</p> <p>M08.B-E.2.1.1 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.</p>
	Numbers, measures, expressions, equations, and inequalities can represent mathematical situations and structures in many equivalent forms.	How can one use numbers and symbols to represent mathematical ideas?	Multiple Representations of Relations	<p>Students should be able to use multiple representations to represent relations.</p> <p>Students should be able to translate among different verbal, tabular, graphical, and algebraic representations of relations.</p>	<p>Words, Equations, Tables, and Graphs</p> <p>Glencoe Math Accelerated (2014) Section 1-7 Pages 37-41</p>	Equation	<p>CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connection numerical, algebraic, and or graphical representations.</p> <p>M07.B-E.2.2.1 Solve word problems leading to an equations of the form $px + q = r$ and $p(x + q) = r$, where p, q and r are specific rational numbers.</p>
	Relations and functions are mathematical relationships that can be represented and analyzed using words, tables, graphs, and equations.	In what ways can a linear function be represented?	<p>All functions are relations.</p> <p>A linear function can be represented and analyzed using many different forms.</p>	<p>Students should be able to determine if a relation is a function.</p> <p>Students should be able to write a function using function notation.</p>	<p>Functions</p> <p>Glencoe Math Accelerated (2014) Section 9-1 Pages 384-389</p>	<p>Function</p> <p>Relation</p> <p>Domain</p> <p>Range</p> <p>Independent variable</p> <p>Dependent variable</p> <p>Vertical line test</p> <p>Function rule</p>	<p>CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations</p>

						Function notation	
	Relations and functions are mathematical relationships that can be represented and analyzed using words, tables, graphs, and equations.	In what ways can a linear function be represented?	<p>Linear function in terms of slope.</p> <p>A linear function can be represented and analyzed using many different forms.</p>	<p>Students should be able to solve linear functions with two variables.</p> <p>Students should be able to graph linear functions using ordered pairs.</p>	<p>Representing Linear Functions</p> <p>Glencoe Math Accelerated (2014) Section 9-2 Pages 390-395</p>	<p>Linear Equation</p> <p>Linear function</p> <p>Function table</p> <p>x-intercept</p> <p>y-intercept</p>	CC.2.2.7.B.3 Model and solve real world and mathematical problems by using and connecting numerical, algebraic and/or graphical representations
	Relations and functions are mathematical relationships that can be represented and analyzed using words, tables, graphs, and equations.	In what ways can a linear function be represented?	<p>Linear function in terms of slope.</p> <p>A linear function can be represented and analyzed using many different forms.</p>	<p>Students should be able to find the constant rate of change for a linear relationship.</p> <p>Students should be able to find the slope of a line.</p>	<p>Constant Rate of Change and Slope</p> <p>Glencoe Math Accelerated (2014) Section 9-3 Pages 396-402</p>	<p>Rate of Change</p> <p>Linear relationship</p> <p>Constant rate of change</p> <p>Slope</p>	<p>CC.2.1.7.D.1 Analyze proportional relationships and use them to model and solve real-world problems.</p> <p>CC.2.2.8.B.2 Understand the connection between proportional relationships, lines and linear equations.</p> <p>M07.A-R.1.1.2 Determine whether two quantities are proportionally related (e.g. by testing for equivalent ratios in a table, graphing on a coordinate plane, and observing whether the graph is a straight line through the organs)</p> <p>M07.A-R.1.1.5 Explain what a point (x,y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0,0) and (1,r) where r is the unit rate.</p> <p>M08.B-E.2.1.1 Graph proportional relationships interpreting the unit rate as the slope of the graph. Compared two different proportional relationships represented in different ways. (ex. Compare a distance–time graph to a distance –time equation to determine which two moving objects has a greater speed.</p>

Review Unit 7 Quiz 1 day

Unit 7 Quiz 1 day

	Review Unit 7 Quiz 1 day						
	Unit 7 Quiz 1 day						
	Relations and functions are mathematical relationships that can be represented and analyzed using words, tables, graphs, and equations.	In what ways can a linear function be represented?	<p>Linear function in terms of slope.</p> <p>A linear function can be represented and analyzed using many different forms.</p>	<p>Students should be able to determine the slopes and y-intercepts of lines.</p> <p>Students should be able to graph linear equations using the slope and y-intercept.</p>	<p>Slope-intercept Form</p> <p>Glencoe Math Accelerated (2014) Section 9-5 Pages 412-417</p>	<p>Slope-intercept form</p> <p>X-Intercept</p> <p>y-Intercept</p>	CC.2.2.7.B.3 Model real-world and mathematical problems by using and connection numerical, algebraic, and/or graphical representations.
	Relations and functions are mathematical relationships that can be represented and analyzed using words, tables, graphs, and equations.	In what ways can a linear function be represented?	<p>Linear function in terms of slope.</p> <p>A linear function can be represented and analyzed using many different forms.</p>	<p>Students should be able to solve systems of equations by graphing.</p> <p>Students should be able to determine the number of solutions of a system of linear equations.</p>	<p>Solving Systems of Equations by Graphing</p> <p>Glencoe Math Accelerated (2014) Section 9-6 Pages 420-424</p>	<p>Systems of Equations</p>	<p>CC.2.2.8.B.3 Analyze and solve linear equations and pairs of simultaneous linear equations.</p> <p>M08.B-E.2.1.3 Interpret solutions to a system of two linear equations in two variables as points of intersection of their graphs because points of intersection satisfy both equations simultaneously.</p> <p>M08.B-E.3.1.4 Solve systems of equations in two variables algebraically and estimate the solutions by graphing the equations. Solve simple cases by inspection. (ex. $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</p> <p>M08.B-E.3.1.5 Solve real-world and mathematical problems leading to two linear equations in two variables, (ex. Given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair of points.)</p>
	Relations and functions are mathematical	In what ways can a linear function be represented?	All functions are relations.	Students should be able to solve a system of equations algebraically.	Solving Systems of Equations Algebraically	Substitution	CC.2.2.8.B.3 Analyze and solve linear equations and pairs of simultaneous linear equations.

	relationships that can be represented and analyzed using words, tables, graphs, and equations.		<p>Linear function in terms of slope.</p> <p>A linear function can be represented and analyzed using many different forms.</p>	Students should be able to interpret the meaning of the solutions of a system of equations.	Glencoe Math Accelerated (2014) Section 9-7 Pages 425-429		<p>M08.B-E.2.1.3 Interpret solutions to a system of two linear equations in two variables as points of intersection of their graphs because points of intersection satisfy both equations simultaneously.</p> <p>M08.B-E.3.1.4 Solve systems of equations in two variables algebraically and estimate the solutions by graphing the equations. Solve simple cases by inspection. (ex. $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</p> <p>M08.B-E.3.1.5 Solve real-world and mathematical problems leading to two linear equations in two variables, (ex. Given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair of points.)</p>
	Relations and functions are mathematical relationships that can be represented and analyzed using words, tables, graphs, and equations.	How do you write, solve, graph, and interpret linear equations and inequalities to model relationships between quantities?	<p>Linear relationships: Equation and inequalities in one and two variables</p>	<p>Students should be able to graph linear inequalities on a coordinate plane.</p> <p>Student should be able to solve inequalities by graphing.</p> <p>Students should be able to use linear inequalities when modeling real-world situations.</p>	<p>Graphing Inequalities in Two Variables</p> <p>Resources: Glencoe-Algebra 1 Section 5-6 (pgs 315-320)</p> <p>Pearson-Algebra 1 Section 6-5 (pgs394-399)</p>	<p>Boundary</p> <p>Half-plane</p> <p>Closed half-plane</p> <p>Open half-plane</p>	<p>Pre-requisite Skills for:</p> <p>2.8.A1.B-Evaluate and simplify not understood algebraic expressions and solve and graph linear equations and inequalities.</p> <p>2.8.A1.E-Use combinations of symbols and numbers to create expressions, equations, and inequalities in two or more variables, systems of equations, and inequalities, and functional relationships that model problem situations.</p> <p>A1.1.3.2-Write, solve, and/or graph systems of linear inequalities using various methods.</p> <p>A1.1.3.2.1-Write and/or solve a system of linear inequalities using graphing. Note: Limit systems to two linear inequalities.</p> <p>A1.1.3.2.2-Interpret solutions to</p>

							problems in the context of the problem situation. Note: Limit systems to two linear inequalities.
	Review Common Assessment Unit 7 Equations and Inequalities 2 days						
	Test Common Assessment Unit 7 Equations and Inequalities 1 days						
Unit 8 Data Analysis/ Probability							
Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
17 Days	Some questions can be answered by collecting, representing, and analyzing data, and the question to be answered determines the data to be collected, how best to collect it, and how best to represent it.	How are statistics used to draw inferences about and compare populations?	Sampling as a method of estimation and prediction	Students should be able to identify various sampling techniques. Students should be able to determine the validity of a sample and predict the actions of the larger group. Students should be able to recognize when statistics and graphs are misleading.	Introduction to Statistics Glencoe Math Accelerated (2014) Section 10-5 Pages 462-467	Sample Population Unbiased sample Random Simple random sample Stratified random sample Systematic random sample Biased sample Convenience sample Voluntary response sample	CC.2.4.7.B.1 Draw inferences about populations based on random sampling concepts. M07.D-S.1.1.1 Determine whether a sample is a random sample given a real-world situation. M07.D-S.1.1.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. (Ex. 1 Estimate the mean word length in a book by randomly sampling words from a book; Ex.2 Predict the winner of a school election based on randomly sampled survey data)
	Some questions can be answered by collecting, representing, and	How are statistics used to draw inferences about and compare populations?	Data Representations, Interpretations, and Analyses	Students should be able to use the mean, median and mode as measures of central tendency.	Measures of Center Glencoe Math Accelerated (2014)	Statistics Measures of center	CC.2.3.7.B.2 Draw informal comparative inferences about two populations.

	analyzing data, and the question to be answered determines the data to be collected, how best to collect it, and how best to represent it.			Students should be able to choose appropriate measures of central tendency and recognize measures of statistics.	Section 10-1 Pages 434-439		M07.D-S.2.1.1 Compare two numerical data distributions using measures of center and variability. <i>(Ex1. The mean height of players on the basketball team is 10 cm greater than the mean height of player on the soccer team. This difference is equal to approximately twice the variability (mean absolute deviation) on either team On a line plot; note the difference between the two distributions of height. Ex 2. Decide whether the words in a chapter of a 7th grade science book are generally longer than the words in a chapter of a 4th grade science book.)</i>
	Some questions can be answered by collecting, representing, and analyzing data, and the question to be answered determines the data to be collected, how best to collect it, and how best to represent it.	How are statistics used to draw inferences about and compare populations?	Data Representations, Interpretations, and Analyses	Students should be able to find measures of variability. Students should be able to use measures of variability to interpret and analyze data.	Measures of Variability Glencoe Math Accelerated (2014) Section 10-2 Pages 440-446	Measures of variability Range Quartiles First quartile Third quartile Interquartile range outlier	CC.2.3.7.B.2 Draw informal comparative inferences about two populations. M07.D-S.2.1.1 Compare two numerical data distributions using measures of center and variability. <i>(Ex1. The mean height of players on the basketball team is 10 cm greater than the mean height of player on the soccer team. This difference is equal to approximately twice the variability (mean absolute deviation) on either team On a line plot; note the difference between the two distributions of height. Ex 2. Decide whether the words in a chapter of a 7th grade science book are generally longer than the words in a chapter of a 4th grade science book.)</i>
	Some questions can be answered by collecting, representing, and analyzing data, and the question to be answered determines the data to be	How are statistics used to draw inferences about and compare populations?	Data Representations, Interpretations, and Analyses	Students will be able to compare two populations using the measures of center and variability. Students should be able to compare two populations when only one is symmetric.	Compare Populations Glencoe Math Accelerated (2014) Section 10-4 Pages 454-460	Box plot Double Box Plot	CC.2.3.7.B.2 Draw informal comparative inferences about two populations. M07.D-S.2.1.1 Compare two numerical data distributions using measures of center and variability. <i>(Ex1. The mean height of players on the basketball team is 10 cm greater</i>

	collected, how best to collect it, and how best to represent it.						than the mean height of player on the soccer team. This difference is equal to approximately twice the variability (mean absolute deviation) on either team On a line plot; note the difference between the two distributions of height. Ex 2. Decide whether the words in a chapter of a 7th grade science book are generally longer than the words in a chapter of a 4th grade science book.)
	Some questions can be answered by collecting, representing, and analyzing data, and the question to be answered determines the data to be collected, how best to collect it, and how best to represent it.	How are statistics used to draw inferences about and compare populations?	Elementary Probability	Students should be able to find the probability of simple events. Students should be able to find the probability of the complement of an event.	Probability of Simple Events Glencoe Math Accelerated (2014) Section 10-6 Pages 470-474	Outcome Simple event Probability Sample space complement	CC.2.4.7.B.3 Investigate chance processes and develop, use and evaluate probability models. M07.D-S.3.1.1 Predict or determine whether some outcomes are certain, more like, less likely or impossible (i.e., a probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event)
	Some questions can be answered by collecting, representing, and analyzing data, and the question to be answered determines the data to be collected, how best to collect it, and how best to represent it.	How are statistics used to draw inferences about and compare populations?	Elementary Probability	Students should be able to find the number of outcomes for an event. Students should be able to find the probability of a compound event.	Probability of Compound Events Glencoe Math Accelerated (2014) Section 10-8 Pages 482-486	Compound events Tree diagram Fundamental Counting Principal	CC.2.4.7.B.3 Investigate chance processes and develop, use and evaluate probability models M07.D-S.3.2.3 Find the probabilities of independent compound events using organized lists, tables, tree diagrams and simulations.
	Review Unit 8 Data Analysis and Probability Common Assessment (2 Days)						
	Unit 8 Data Analysis and Probability Common Assessment (1 Day)						

Unit 9 Geometry

Estimated Time Frame for Unit	Big Ideas	Essential Question	Concepts	Competencies	Lesson Plans and Suggested Resources	Vocabulary	Standards/Eligible Content
14 Days	Geometric relationships can be described, analyzed and classified based on special reasoning and/or visualization.	How do you determine congruence and similarity?	Properties of Angles and their Measure	<p>Students should be able to examine relationship between pairs of angles.</p> <p>Students should be able to use properties of angle types and properties of angles formed when two parallel lines are cut by a transversal.</p>	<p>Angles and Line Relationship</p> <p>Glencoe Math Accelerated (2014) Section 11-1 Pages 494-500</p>	<p>Vertical angles</p> <p>Adjacent angles</p> <p>Complementary angles</p> <p>Supplementary angles</p> <p>Perpendicular lines</p> <p>Parallel lines</p> <p>Transversals</p> <p>Alternate interior angles</p> <p>Alternate exterior angles</p> <p>Corresponding angles</p>	<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area surface area, circumference and volume.</p> <p>M07.C-G. 2.1.1 Identify and use properties of supplementary, complementary, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>M07.C-G.2.1.2 Identify and use properties of angles formed when two parallel lines are cut by a transversal (e.g., angles may include alternate interior, alternate exterior, vertical, corresponding)</p>
	Geometric relationships can be described, analyzed and classified based on special reasoning and/or visualization.	How do you determine congruence and similarity?	<p>Geometric Figures and their Properties</p> <p>Congruence</p>	<p>Students should be able to apply the properties of all types of triangles based on angle and side measure.</p> <p>Students should be able to find the missing angle measure of a triangle.</p> <p>Students should be able</p>	<p>Triangles and Polygons</p> <p>Glencoe Math Accelerated (2014) Section 11-2 Pages 503-508 Section 11-3 Pages 513-518</p>	<p>Line segment</p> <p>Triangle</p> <p>Vertex</p> <p>Interior angle</p> <p>Exterior angle</p> <p>Congruent</p>	<p>CC.2.3.7.A.2 Visualize and represent geometric figures and describe the relationship between them.</p> <p>M07.C-G.1.1.2 Identify or describe the properties of all types of triangles based on angle and side measure.</p> <p>M07.C-G.1.1.3 Use and apply the Triangle Inequality theorem.</p>

				<p>to classify a triangle by its angles and by its sides.</p> <p>Students should be able to classify polygons.</p> <p>Students should be able to determine the sum of the measures of the interior angles of a polygon.</p>		<p>Polygon</p> <p>Diagonal</p> <p>Regular polygon</p>	
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Geometric Figures Circumference	<p>Students should be able to solve problems involving area and circumference of circles.</p> <p>Students should be able to find the circumference of a circle.</p>	<p>Circles and Circumference</p> <p>Glencoe Math Accelerated (2014) Section 12-1 Pages 558-562</p>	<p>Circle</p> <p>Center</p> <p>Diameter</p> <p>Radius</p> <p>Circumference</p> <p>Pi</p>	<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p> <p>M07.C-G.2.2.1 Find the area and circumference of a circle. Solve problems involving area and circumference of a circle(s).</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Geometric Figures Area of Geometric Figures	<p>Students should be able to solve problems involving area and circumference of circles</p> <p>Students should be able to find areas of circles.</p> <p>Students should be able to use areas of circles to solve problems.</p>	<p>Area of Circles</p> <p>Glencoe Math Accelerated (2014) Section 12-2 Pages 563-567</p>		<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p> <p>M07.C-G.2.2.1 Find the area and circumference of a circle. Solve problems involving area and circumference of a circle(s).</p>
	There are some mathematical relationships that are always true, and these relationships are	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Geometric Figures Area of Composite Figures	<p>Students should be able to solve problems involving area and circumference of circles</p> <p>Students should be able</p>	<p>Area of Composite Figures</p> <p>Glencoe Math Accelerated (2014) Section 12-3</p>	Composite Figures	<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p> <p>M07.C-G.2.2.2 Solve real world and</p>

	used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.			to find the area of composite figures. Students should be able to solve problems involving area of composite figures.	Pages 568-573		mathematical problems involving area, volume, and surface area of two-dimensional and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Volume of Solids	Students should be able to solve mathematical problems involving area, volume, and surface area of two and three-dimensional figures. Students should be able to find volumes of prisms. Students should be able to find volumes of composite figures	Volume of Three-Dimensional Figures Glencoe Math Accelerated (2014) Section 12-5 Pages 580-585	Volume	CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume. M07.C-G.2.2.2 Solve real world and mathematical problems involving area, volume, and surface area of two-dimensional and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Volume of Solids	Students should be able to solve mathematical problems involving area, volume, and surface area of two and three-dimensional figures. Students should be able to find the volume of a circular cylinder. Students should be able to Find volumes of composite figures involving circular cylinders.	Volume of Cylinders Glencoe Math Accelerated (2014) Section 12-6 Pages 586-590		CC.2.3.8.A.1 Apply the concept of volume of cylinders, cones and spheres to solve real-world and mathematical problems. M08.C-G.3.1.1 Apply formulas for volumes of cones, cylinders, and spheres to solve real-world and mathematical problems.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Volume of Solids	Students should be able to solve mathematical problems involving area, volume, and surface area of two and three-dimensional figures. Students should be able to find the volume of	Volume of Pyramids, Cones, and Spheres. Glencoe Math Accelerated (2014) Section 12-7 Pages 595-600	Sphere	CC.2.3.8.A.1 Apply the concept of volume of cylinders, cones and spheres to solve real-world and mathematical problems. M08.C-G.3.1.1 Apply formulas for volumes of cones, cylinders, and spheres to solve real-world and mathematical problems.

	useful for writing equivalent forms of expressions and solving equations and inequalities.			pyramids, cones and spheres.			
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Surface Area	<p>Students should be able to solve mathematical problems involving area, volume, and surface area of two and three-dimensional figures.</p> <p>Students should be able to find lateral area and surface area of prisms.</p> <p>Students should be able to find surface area of real-world objects shaped like prisms.</p>	<p>Surface areas of Prisms.</p> <p>Glencoe Math Accelerated (2014) Section 12-8 Pages 603-607</p>	<p>Lateral faces</p> <p>Lateral area</p> <p>Surface area</p>	<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p> <p>M07.C-G.2.2.2 Solve real world and mathematical problems involving area, volume, and surface area of two-dimensional and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Surface Area	<p>Students should be able to solve mathematical problems involving area, volume, and surface area of two and three-dimensional figures.</p> <p>Students should be able to find lateral area and surface area of cylinders.</p> <p>Students should be able to compare surface areas of cylinders.</p>	<p>Surface areas of Cylinders.</p> <p>Glencoe Math Accelerated (2014) Section 12-9 Pages 610-614</p>		<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p> <p>M07.C-G.2.2.1 Find the area and circumference of a circle. Solve problems involving area and circumference of a circle(s).</p> <p>M07.C-G.2.2.2 Solve real world and mathematical problems involving area, volume, and surface area of two-dimensional and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Surface Area	<p>Students should be able to solve mathematical problems involving area, volume, and surface area of two and three-dimensional figures.</p> <p>Students should be able to find lateral area and surface area of pyramids</p>	<p>Surface areas of Pyramids and Cones.</p> <p>Glencoe Math Accelerated (2014) Section 12-10 Pages 615-620</p>	<p>Regular pyramids</p> <p>Slant height</p>	<p>CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p> <p>M07.C-G.2.2.1 Find the area and circumference of a circle. Solve problems involving area and circumference of a circle(s).</p>

	equivalent forms of expressions and solving equations and inequalities.			and cones.			M07.C-G.2.2.2 Solve real world and mathematical problems involving area, volume, and surface area of two-dimensional and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
	There are some mathematical relationships that are always true, and these relationships are used as the rules of arithmetic and algebra and are useful for writing equivalent forms of expressions and solving equations and inequalities.	What do geometric formulas tell us about the properties of objects in two and three dimensions?	Geometric Figures	Students should be able to describe the two dimensional figures that result from slicing a three-dimensional figure. Students should be able to identify three-dimensional figures.	Three-Dimensional Figures Glencoe Math Accelerated (2014) Section 12-4 Pages 574-579	Plane Solids Polyhedron Edge Vertex Face Prism Bases Pyramid Cylinder Cone Cross Section	CC.2.3.7.A.2 Visualize and represent geometric figures and describe the relationship between them. M07.C-G.1.1.4 Describe the two-dimensional figures that result from slicing three-dimensional figures.
	Review Unit 9 Geometry Common Assessment (1 Day)						
	Unit 9 Geometry Common Assessment (1 Day)						