### **Monroe Township Schools**



### **Curriculum Management System**

HS 101 Mathematics Summer Enrichment Entering 9<sup>th</sup> graders January 2006

\* For adoption by all regular education programs as specified and for adoption or adaptation by all Special Education Programs in accordance with Board of Education Policy # 2220. Board Approved: June 28, 2006

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#### Acknowledgments

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# Monroe Township Schools

Mission and Goals

### **Mission**

The mission of the Monroe Township School District, a unique multi-generational community, is to collaboratively develop and facilitate programs that pursue educational excellence and foster character, responsibility, and life-long learning in a safe, stimulating, and challenging environment to empower all individuals to become productive citizens of a dynamic, global society.

### <u>Goals</u>

To have an environment that is conducive to learning for all individuals.

To have learning opportunities that are challenging and comprehensive in order to stimulate the intellectual, physical, social and emotional development of the learner.

To procure and manage a variety of resources to meet the needs of all learners.

To have inviting up-to-date, multifunctional facilities that both accommodate the community and are utilized to maximum potential.

To have a system of communication that will effectively connect all facets of the community with the Monroe Township School District.

To have a staff that is highly qualified, motivated, and stable and that is held accountable to deliver a safe, outstanding, and superior education to all individuals.

### Philosophy

Monroe Township Schools are committed to providing all students with a quality education resulting in life-long learners who can succeed in a global society. The mathematics program, grades K-12, is predicted on that belief and is guided by the following six principals as stated by the National Council of Teachers of Mathematics (NCTM) in the *Principles and Standards for School Mathematics, 2000.* First, a mathematics education requires equity. All students will be given worthwhile opportunities and strong support to meet high mathematical expectations. Second, a coherent mathematics curriculum will effectively organize, integrate, and articulate important mathematics, students as learners, and pedagogical strategies, b) having a challenging and supportive classroom environment and c) continually reflecting on and refining instructional practice. Fourth, students must learn mathematics with understanding. A student's prior experiences and knowledge will actively build new knowledge. Fifth, assessment should support the learning of important mathematics and provide useful information to both teachers and students. Lastly, technology enhances mathematics learning, supports effective mathematics teaching, and influences what mathematics is taught.

As students begin their mathematics education in Monroe Township, classroom instruction will reflect the best thinking of the day. Children will engage in a wide variety of learning activities designed to develop their ability to reason and solve complex problems. Calculators, computers, manipulatives, technology, and the Internet will be used as tools to enhance learning and assist in problem solving. Group work, projects, literature, and interdisciplinary activities will make mathematics more meaningful and aid understanding. Classroom instruction will be designed to meet the learning needs of all children and will reflect a variety of learning styles.

In this changing world those who have a good understanding of mathematics will have many opportunities and doors open to them throughout their lives. Mathematics is not for the select few but rather is for everyone. Monroe township Schools are committed to providing all students with the opportunity and the support necessary to learn significant mathematics with depth and understanding. This curriculum guide is designed to be a resource for staff members and to provide guidance in the planning, delivery, and assessment of mathematics instruction.

### **Educational Goals**

HS 101 Mathematics Summer Enrichment is designed to prepare incoming ninth graders for Algebra I or Dynamics of Algebra I and to be successful in a high school environment. The mathematical topics include: order of operations, exponents and powers, scientific notation, operations with real numbers, absolute value, and linear equations. In addition, students will become familiar with the high school setting. Students will learn school rules and policies, study skills, and note taking skills.

#### New Jersey State Department of Education Core Curriculum Content Standards

#### A note about Mathematics Standards and Cumulative Progress Indicators.

The New Jersey Core Curriculum Content Standards for Mathematics were revised in 2002. The Cumulative Progress Indicators (CPI's) referenced in this curriculum guide refer to these new standards and may be found in the Curriculum folder on the district servers. A complete copy of the new Core Curriculum Content Standards for Mathematics may also be found at: <a href="http://www.nj.gov/njded/cccs/s4\_math.htm">http://www.nj.gov/njded/cccs/s4\_math.htm</a>

### HS 101 Mathematics Summer Enrichment

## Scope and Sequence

Week I		
I. Pre-Test     II. Real Numbers     a. Operations With Real Numbers		
b. Variables c. Absolute Value		
We	ek II	
III. Real Numbers		
<ul> <li>a. Exponents and Powers</li> <li>Positive, Negative, and Zero Exponents</li> <li>Properties of Exponents</li> <li>b. Scientific Notation</li> <li>c. Order of Operations</li> <li>d. Distributive Property</li> </ul>		

Wee	ek III
<ul> <li>IV. Linear Equations <ul> <li>a. Translating words into algebraic expressions</li> <li>b. Applications</li> <li>c. Forming Equations</li> <li>d. Solving One-Step Equations</li> <li>e. Solving Multi-Step Equations</li> <li>I Combining Like Terms and Solving</li> <li>Using the Distributive Property</li> <li>Rational Coefficients</li> <li>f. Solving Equations with Variables on Both Sides of Equation</li> </ul> </li> </ul>	
Wee	ek IV
<ul> <li>V. Graphing <ul> <li>a. Collecting, organizing, and representing data</li> <li>b. Graph change</li> <li>c. Change representation of data from tables to graphs and vice versa</li> <li>d. Use tables and graphs to compare rates and find patterns of change</li> <li>e. Create a table and graph on the graphing calculator</li> </ul> </li> <li>VI. Post-Test</li> </ul>	

	Curriculum Management System	Topic: Real Numbers	
	Grade Level/Subject: Grade 9	Goal 1: The student will be able to perform operations with real numbers variables, and simplify algebraic expressions.	, evaluate expressions with
s of	HS 101 Mathematics Summer Enrichment	· · · · · · · · · · · · · · · · · · ·	
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools /
uggested struction	Cumulative Progress Indicators (CPI's)	Sample Conceptual Understandings	Materials / Technology / Resources / Learning Activities / Interdisciplinary Activities / Assessment
<u>ات</u> در	The student will be able to:		Model
			Pre-Test
		<ul> <li>Organizational Skills</li> <li>The student will be able to be a successful mathematics student by understanding and applying organizational skills, note taking skills, and mathematics textbook reading strategies.</li> <li>How many sections should a mathematics notebook have? What should be the heading of these sections?</li> <li>What are the benefits to being organized?</li> </ul>	<ul> <li>Sample Math Notebook</li> <li>Math Binder</li> <li>Divider for a Binder</li> <li>Student Success Packet</li> <li><u>McDougal-Littell: Algebra 1</u> (2004)</li> <li>Worksheet: Strategies for Reading Mathematics</li> </ul>
		<ul> <li>They are nine guidelines to being successful in the classroom. List five and explain how they contribute to success.</li> <li>There are six guidelines to taking good notes. List four and explain how they contribute to taking good notes.</li> <li>Explain how to effectively read a math textbook.</li> </ul>	
3	(CPI 4.1.12 A1, B1)	<ul> <li>Describe how you can compare the following types of numbers to decide which is greater. Use examples to illustrate your thinking.         <ul> <li>Two positive numbers</li> <li>Two negative numbers</li> <li>A positive number and a negative number</li> </ul> </li> <li>When you add two integers, how can you decide whether their sum will be positive, negative, or zero?</li> <li>Describe a real life situation which could be modeled by a negative number subtracted from a positive number.</li> <li>Suppose the Rocky Mountains have 72 centimeters of snow. Warmer weather is melting the snow at a rate of 5.8 centimeters a day. If the snow</li> </ul>	Connected Math – Accentuate the Negative (2004) - Investigation 1: Extending the Number Line - Investigation 2: Adding Integers - Investigation 3: Subtracting Integers - Investigation 4: Multiplying and Dividing Integers

	Curriculum Management System	Topic: Real Numbers	
	Grade Level/Subject: Grade 9	<b><u>Goal 1:</u></b> The student will be able to perform operations with real numbers, evaluate expressions with variables, and simplify algebraic expressions.	
s of	HS 101 Mathematics Summer Enrichment		
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools /
ggested truction	Cumulative Progress Indicators (CPI's)	Sample Conceptual Understandings	Materiais / Technology / Resources / Learning Activities / Interdisciplinary Activities / Assessment
Sug	The student will be able to:		Model
		<ul> <li>continues to melt at this rate, after seven days of the warm weather, how much snow will be left?</li> <li>Alexis says she is thinking about a number whose absolute value is 19. What are all the possible numbers she could be thinking about?</li> <li>Joe is in debt \$54. He was further in debt, but he has been paying \$4 a month on his debt for the last 10 months. How much was Joe in debt 10 months ago? At his present rate, how much longer will it take Joe to pay off his debt?</li> </ul>	<ul> <li><u>McDougal-Littell: Algebra 1</u> (2004) <ul> <li>2.2 Addition of Real Numbers (pg. 72-77)</li> <li>2.3 Subtraction of Real Numbers (pg. 79-85)</li> <li>2.5 Multiplication of Real Numbers (pg. 93- 98)</li> <li>2.7 Division of Real Numbers (pg. 109-114)</li> </ul> </li> <li>Game: The Integer Product Game - consists of a list of factors and a grid of products. Two players compete to get four squares in a row.</li></ul>
1	<ul><li>1.2. Evaluate Expressions with Variables</li><li>(CPI 4.1.12 A1, B1; 4.3.12 D1)</li></ul>	How do you evaluate an expression that contains variables?	McDougal-Littell: Algebra1 (2004) - 1.1 Variables in Algebra (pg. 3-8) - 1.1 Activity Lesson Opener

	Curriculum Management System	Topic: Real Numbers	
	Grade Level/Subject:	Goal 1: The student will be able to perform operations with real numbers	, evaluate expressions with
	HS 101 Mathematics Summer	variables, and simplify algebraic expressions.	
s of	Enrichment	iment	
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools /
gested uction	Cumulative Progress Indicators (CPI's)	Sample Conceptual Understandings	Materials / Technology / Resources / Learning Activities / Interdisciplinary
Sug	The student will be able to:		Activities / Assessment Model
1	<ul><li>1.3. Evaluate Expressions Using Absolute Value. (CPI 4.1.12 B1)</li></ul>	<ul> <li>Define absolute value.</li> <li>Solve  x  = 4.3</li> </ul>	<u>McDougal-Littell: Algebra1</u> (2004) - 2.1 Variables in Algebra (pg. 65-70)
1/2	<ul> <li>1.4. Use Multiplication Properties of Exponents to Simplify Expressions With Positive Integers as Exponents. (CPI 4.1.12 B1, B2, B4)</li> </ul>	<ul> <li>A tank has the shape of a cube. Each edge is 4.5 feet long. Find the volume in cubic feet.</li> <li>Simplify: (x<sup>2</sup>)(x<sup>3</sup>)</li> <li>Simplify: (x<sup>2</sup>)<sup>3</sup></li> </ul>	McDougal-Littell: Algebra 1 (2004) - 1.2 Exponents and Powers (pg. 9-14) - 8.1 Multiplication Properties of Exponents (pg. 450- 455)
1/2	<ul><li>1.5. Simplify Expressions With Zero and Negative Integers as Exponents.</li><li>(CPI 4.1.12 B1, B2, B4)</li></ul>	<ul> <li>Simplify: x<sup>0</sup></li> <li>Rewrite with positive exponents: (5x)<sup>-2</sup></li> </ul>	McDougal-Littell: Algebra 1 (2004) - 8.2 Zero and Negative Exponents (pg. 456- 462)

	Curriculum Management System	Topic: Real Numbers	
	Grade Level/Subject: Grade 9	<u>Goal 1:</u> The student will be able to perform operations with real numbers	, evaluate expressions with
s of	HS 101 Mathematics Summer Enrichment		
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools / Materials / Technology /
Suggested Instruction	Cumulative Progress Indicators (CPI's) The student will be able to:	Sample Conceptual Understandings	Resources / Learning Activities / Interdisciplinary Activities / Assessment Model
1	<ul> <li>1.6. Use Division Properties of Exponents to Simplify Expressions with integers and exponents.</li> <li>(CPI 4.1.12 B1, B2, B4)</li> </ul>	<ul> <li>With respect to the exponents, how is dividing two powers of the same nonzero base different from multiplying the same powers?</li> </ul>	McDougal-Littell: Algebra 1 2004 - 8.3 Division Properties of Exponents (pg. 463- 469)
1	<ul> <li>1.7. Convert Numbers from Standard Notation to Scientific Notation and vice- versa.</li> <li>(CPI 4.1.12 B1, B4; 4.5.12 C4)</li> </ul>	<ul> <li>Use the words power and exponent to explain how scientific notation works.</li> <li>Rewrite in decimal form: 2.14 × 10<sup>4</sup></li> <li>Rewrite in decimal form: 2.14 × 10<sup>-4</sup></li> <li>Write 247,000,000 in Scientific Notation.</li> <li>Write 0.0000089 in Scientific Notation.</li> </ul>	McDougal-Littell: Algebra 1 2004 - 8.4 Division Properties of Exponents (pg. 470- 475)
1	<ul><li>1.8. Simplify Algebraic Expressions Using the Order of Operations. (CPI 4.1.12 B1; 4.3.12 D2)</li></ul>	<ul> <li>State the order of operations.</li> <li>Simplify: 16 ÷ 8 · 2<sup>2</sup></li> <li>Using each of the numbers 1, 2, 3, 4, and 5 only once, any, or all of the four symbols +, -, ×, ÷, and grouping symbols if necessary, write expressions that equal 1, 2, 3, 4, and 5.</li> </ul>	<u>Connected Math – Say it with</u> <u>Symbols</u> (2004) - Investigation 1: Order of Operations

	Curriculum Management System	Topic: Real Numbers	
	Grade Level/Subject:	Goal 1: The student will be able to perform operations with real numbers	, evaluate expressions with
	Grade 9	variables, and simplify algebraic expressions.	
's of	Enrichment		
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools /
ggested truction	Cumulative Progress Indicators (CPI's)	Sample Conceptual Understandings	Materials / Technology / Resources / Learning Activities / Interdisciplinary Activities / Assessment
Su	The student will be able to:		Model
1	<ul> <li>1.9. Simplify and Evaluate Algebraic Expressions by Using the Distributive Property. (CPI 4.1.12 B1; 4.3.12 D2)</li> </ul>	<ul> <li>Write 5x + 8x in factored form.</li> <li>Write 5(x + 7) in expanded form.</li> <li>What is the difference between these two expressions: a ÷ (b + c) and (b + c) ÷ a</li> <li>What is a like term? What is a coefficient?</li> </ul>	<u>Connected Math – Say it with</u> <u>Symbols</u> (2004) - Investigation 2: Equivalent Expressions - Investigation 3: Some Important Properties <u>McDougal-Littell: Algebra 1</u> 2004 - 2.6 The Distributive Property (pg. 100-107)
		<ul> <li>Study Skills and Test Taking Strategies</li> <li>The student will be able to be a successful mathematics student by understanding and applying study skills and test taking strategies</li> <li>There are five guidelines to "study smart." List those guidelines and explain how they contribute to "studying smart."</li> <li>There are ten test taking strategies. List six and explain how they improve test performance.</li> <li>State two different ways to reduce test anxiety.</li> </ul>	Student Success Packet

	Curriculum Management System	Topic: Solve Linear Equations	
	Grade Level/Subject: Grade 9	Goal 2: The student will be able to solve various linear equations.	
s of	HS 101 Mathematics Summer Enrichment	IS 101 Mathematics Summer	
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools /
uggested on the struction	Cumulative Progress Indicators (CPI's) The student will be able to:	Sample Conceptual Understandings	Materials / Technology / Resources / Learning Activities / Interdisciplinary Activities / Assessment Model
<u>, 0, –</u> 1/2	2.1. Translate English Phrases Into Algebraic Expressions. (CPI 4.3.12 C1)	<ul> <li>Write an equation to represent the following problem: The temperature was x°F. It fell 2°F and is now 7°F. What was the original temperature?</li> <li>Write an expression for the following word problems: Seven more than twice a number x Four times the difference between a number x and five Six less than a number x multiplied by three</li> </ul>	<u>Connected Math – Accentuate</u> <u>the Negative</u> (2004) - Investigation 4 Solving Equations (4.1-4.3)
1/2	<ul><li>2.2. Model and Solve One-Step Linear Equations. (CPI 4.3.12 C1, D2)</li></ul>	<ul> <li>Compare solving an equation to balancing a scale.</li> <li>Describe in words how you would solve the equation x+6 = -4 using inverse operations.</li> <li>It takes 45 peanuts to make one ounce of peanut butter. How many peanuts will be needed to make a 12 ounce jar of peanut butter?</li> </ul>	McDougal-Littell: Algebra 1 2004 - 3.1 Solving Equations using Addition and Subtraction (pg.132- 137) - 3.2 Solving Equations
1/2	2.3. Model and Solve Multi-Step Linear Equations. (CPI 4.3.12 C1, D2)	<ul> <li>Describe how to solve a multi-step linear equation.</li> <li>The sum of three numbers is 123. The second number is 9 less than two</li> </ul>	using Multiplication and Division (pg. 138-142)
1/2	2.4. Combine Like Terms to Solve Linear Equations. (CPI 4.3 12 C1, D1, D2)	<ul> <li>times the first number. The third number is 6 more than three times the first number. Find the first number.</li> <li>Solve the equation -6x + 3(4x-1) = 9. Organize your work into two columns.</li> </ul>	<u>McDougal-Littell: Algebra 1</u> 2004
1/2	2.5. Use the Distributive Property to Solve Linear Equations. (CPI 4.3.12 C1, D2)	In the left-hand column show the solution steps. In the right-hand column explain the transformation you used in each step.	- 3.3 Solving Multi-Step Equations (pg.145-151)
	2.6. Solve Linear Equations with Rational Coefficients or Constants. (CPI 4.3.12 C1, D2)		

	Curriculum Management System	Topic: Solve Linear Equations	
	<u>Grade Level/Subject</u> : Grade 9	Goal 2: The student will be able to solve various linear equations.	
s of	HS 101 Mathematics Summer Enrichment		
days	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools /
suggested nstruction	Cumulative Progress Indicators (CPI's) The student will be able to:	Sample Conceptual Understandings	Materials / Technology / Resources / Learning Activities / Interdisciplinary Activities / Assessment
<u> </u>	2.7 Solve Linear Equations with		
	Variables on Both Sides. (CPI 4.3.12 C1, D2)	<ul> <li>When solving equations with variables on both sides of the equation, how do you decide which variable term to add or subtract?</li> </ul>	<u>McDougal-Littell: Algebra 1</u> 2004
		<ul> <li>One third of a stack of paper and a one pound book will balance one fourth of a stack to paper and three one pound books. How much does the stack of paper weigh?</li> </ul>	- 3.4 Solving Equations with Variables on Both Sides (pg.154-159)
		• Solve $9(9 - x) = 4x - 10$ . Explain what you are doing at each step.	
			McDougal-Littell: Algebra 1 2004
	<ul> <li>2.8. Use Rates, Ratios and Percents to solve problems. (CPI 4.1.12 B1, 4.3.12 B2)</li> <li>How are rates and ratios alike? How are they different?</li> <li>About 78% of the air is nitrogen, 21% is oxygen, and 1% is carbon dioxide. In 450 mL of air, how much is oxygen?</li> <li>A store sells a box of 5 frozen yogurt bars for \$1.20. The store also sells a box containing 7 of the same frozen yogurt bars for \$1.59. Which is the better buy? Explain how you decided.</li> </ul>	<ul> <li>How are rates and ratios alike? How are they different?</li> <li>About 78% of the air is nitrogen, 21% is oxygen, and 1% is carbon dioxide.</li> </ul>	- 3.8 Rates, Ratios, and Percents (pg.180-185)
1			McDougal-Littell: Algebra 1 2004
		<ul> <li>In 450 mL of air, how much is oxygen?</li> <li>A store sells a box of 5 frozen yogurt bars for \$1.20. The store also sells a</li> </ul>	Project: Running a Business (pg.198-199)
		Comparing the expenses and income of a business to determine profitability.	
			<ul> <li>Use linear equations to model cost and income for a business.</li> </ul>
			<ul> <li>Use linear equations to compare and find profit.</li> </ul>
			<ul> <li>Use the results from solving linear equations to determine when a business is feasible</li> </ul>
			<ul> <li>Present the results</li> </ul>

	Curriculum Management System		c: Graphing		
	Grade Level/Subject: Grade 9 HS 101 Mathematics Summer		3: Students will be able to collect da	ta, represent data in tables and	graphs, understand change,
of			compare rates, and use a graphing c	alculator.	
ys c	Enric	hment			
da n	Obje	ctives / Cluster Concepts /	ential Questions		Instructional Tools / Materials / Technology / Resources /
estec	(CPI's	s)	pie Conceptual Understandings		Learning Activities /
ugg	<b>T</b> 1 .				Assessment Model
ิ รา	Ine s	student will be able to:	Name some things in the world around you	that yany and that can be	Connected Math Variables
1	3.1.	Collecting, organizing, and	counted or measured. Name two variables	that you think are related.	and Patterns(2004)
		representing data (CPI 4.4.12 A1; 4.5.12 E1)	Explain how you could make a graph to sho wo related variables How would you decir	w the relationship between the device the should be on	<ul> <li>Investigation 1: Variables and</li> </ul>
			he x-axis and which should be on the y-axi	s?	Coordinate Graphs
					Connected Math – Variables
1	3.2.	Graph change	What are the advantages and disadvantage	s of a table? A graph? A written	and Patterns(2004)
		(CPI 4.3.12 B1)	eport?		Change
			maxina a situation in which variable v dans	nde en verieble v (fer everale	Connected Math – Variables
1/2	3.3.	Change representation of data from tables to graphs	/ might be the amount of money in your wa	llet on a trip and x the time you	and Patterns(2004)
		and vice versa	nave been traveling). If y increases as x inc ndicated in a table? In a graph?	creases, how would this be	Graphs and Tables
		(0114.0.12 01, 02)	n a coordinate graph of two related variable straight line?	es, when do the points lie in a	
			5		
1/2	3.4.	Use tables and graphs to	Flag Langer Family is the value of a Michigan	to Florida at an average around	Connected Math – Variables and Patterns(2004)
		compare rates and find patterns of change	of 60 miles per hour. Write an equation for	a rule you can use to calculate	Investigation 4: Patterns and
		(CPI 4.3.12 B2, C1; 4.4.12	he distance they have traveled after any give	ven hour?	Rules
		A2)	<pre>/vnat are the advantages of having an equa situation? A table? A graph?</pre>	ation to represent the previous	
1	3.5.	Create a table and graph on			Connected Math – Variables
the graphing calculator	Write a letter to a friend explaining how to u	se a graphing calculator to	and Patterns(2004)		
		(CPI 4.4.12 A5)	explanation.	מחוףוב נט וווטטנו מנפ צטעו	Graphing Calculator

	Curriculum Management System	Topic: Graphing	
	Grade Level/Subject:	Goal 3: Students will be able to collect data, represent data in tables and graphs, understand cha	
	Grade 9	compare rates, and use a graphing calculator.	
/s of	HS 101 Mathematics Summer Enrichment		
day	Objectives / Cluster Concepts /	Essential Questions	Instructional Tools / Materials
uggested struction	Cumulative Progress Indicators (CPI's)	Sample Conceptual Understandings	/ Technology / Resources / Learning Activities / Interdisciplinary Activities / Assessment Model
s E	The student will be able to:	Della Dectione of a Ulab Ocheck Obsident	
1		<ul> <li>Daily Routines of a High School Student</li> <li>The student will be able to understand the rules and procedures of the high school.</li> <li>If you were at the Nurses Office, how would you get to the Gym?</li> <li>If you were in the auditorium, how would you get to the vice principal's office?</li> <li>How would you get from the main office to the Guidance Office?</li> <li>Name a school procedure and discuss why it is important.</li> <li>Compare and contrast the discipline policy at the high school with the discipline policy at the school you previously attended?</li> </ul>	<ul> <li>Map of MTHS</li> <li>Guided Tour</li> <li>Scavenger Hunt</li> <li>MTHS Student Handbook</li> </ul>
			• Post - Test

#### **HS 101 Mathematics Summer Enrichment**

### **COURSE BENCHMARKS**

- 1. The student will be able to be a successful mathematics student by understanding and applying organizational skills, note taking skills, mathematics textbook reading strategies, study skills, and test taking strategies.
- 2. The student will be able to perform operations with real numbers, evaluate expressions with variables, and simplify algebraic expressions.
- **3.** The student will be able to solve various linear equations.
- 4. Students will be able to collect data, represent data in tables and graphs, understand change, compare rates, and use a graphing calculator.