

ALGEBRA I
MATHEMATICS

SUMMER
SCHOOL

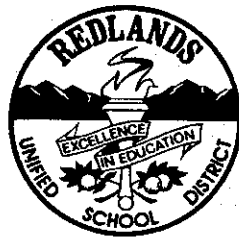
2007

CREDIT RECOVERY

SCOPE

&

SEQUENCE



Redlands Unified School District

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REDLANDS UNIFIED SCHOOL DISTRICT
SCOPE AND SEQUENCE
Competency-Based/Credit-Recovery Program

TEXTBOOKS & MATERIALS:

English – *Timeless Voices, Timeless Themes* by Prentice Hall, Writing and Grammar Exercise Workbook and Student Packet
World History – *Modern World History: Patterns of Interaction* by McDougal-Littell
US History – *The Americans: Reconstruction to the 21st Century* by McDougal-Littell
Earth Science – *Earth Science* by McDougal-Littell
Biology – *Modern Biology* by Holt, Rinehart, Winston
Algebra I – *Algebra I Concepts and Skills* by McDougal-Littell
Functional Algebra I – *Algebra I Concepts and Skills* by McDougal-Littell and Student Packet
Geometry – *Geometry* by McDougal-Littell
Algebra II – *Algebra 2* by Glencoe

INTRODUCTION:

The curriculum for the competency-based Credit-Recovery Program was developed by committees of high school teachers. The curriculum was designed to focus solely on essential State Standards as defined by the blueprints for the California Standards Tests and the California High School Exit Exam. With this in mind, teachers must use the *Scope and Sequence* as the core of their instruction. Everything in the *Scope and Sequence* must be presented according to the timeline specified for each unit of study. *The Credit-Recovery Scope & Sequence* presents the curriculum in six defined units (3 units per semester). The Test Support column specifies core lessons in **bold**. Lessons in italics are optional. Additionally, there may be suggested support lessons for English Language Learners contained within a double box. There may also be suggested tutorial or extra support lessons contained within a dotted box. The Standard column specifies the essential standards to be addressed with each lesson or group of lessons. **While other standards may be secondarily addressed with the core lessons, only those standards that are included on the competency assessment for that unit are listed and must be explicitly taught.**

The heading of each unit specifies the pacing for that unit in terms of number of summer school days as well as how that breaks down in terms of hours. Each summer school day is 4.75 hours broken into two sessions with a 15 minute break between them. Therefore, if a unit specifies 3.5 days, the expectation is for that unit to be completed by the end of Session 1 on the fourth day and that the next unit will begin after the break during Session 2 of the fourth day. Administering the competency assessment is to be included in the time allotted for each unit.

The competency assessment is to be given at the end of each unit within a reasonable time frame to stay on track for completion of all three semester units. Each competency assessment should be administered according to the testing schedule provided by the site administrator. All assessments should be administered in a quiet environment. Students are to complete the assessments individually with no open notes, open books, or calculators.

For more details regarding instruction and assessment for the competency –based program refer to the document on Program Procedures, Policies & Guidelines.



REDLANDS UNIFIED SCHOOL DISTRICT

SCOPE & SEQUENCE: Algebra I *Summer School – Credit Recovery*

Semester: 1

Domain	Standard	Text Support
UNIT 1 – (3.5 days/15.75 hours)		
4.0	Students simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x-5) + 4(x-2) = 12$.	<u>Chapter 2: Properties of Real Numbers</u> Lesson 2.6, TE pp. 99-106 Lesson 2.7, TE pp. 107-112 Lesson 2.8, TE pp. 113-118
4.0	Students simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x-5) + 4(x-2) = 12$.	<u>Chapter 3: Solving Linear Equations</u> Lesson 3.1, TE pp. 132-137 Lesson 3.2, TE pp. 138-143 Lesson 3.3, TE pp. 144-149 Lesson 3.4, TE pp. 151-156 Lesson 3.5, TE pp. 157-162
5.0	Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.	
3.0	Students solve equations and inequalities involving absolute values.	<u>Chapter 6: Solving & Graphing Linear Inequalities</u>
5.0	Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.	Lesson 6.1, TE pp. 323-328 Lesson 6.2, TE pp. 330-335 Lesson 6.3, TE pp. 336-341 Lesson 6.6, TE pp. 355-360 Lesson 6.7, TE pp. 361-366
UNIT 1 COMPETENCY ASSESSMENT		

Domain	Standard	Text Support
UNIT 2 – (4.5 days/20.25 hours)		
6.0	Students graph a linear equation and compute the x-and y-intercepts (e.g., graph $2x + 6y = 4$). They are also able to sketch the region defined by linear inequality (e.g., they sketch the region defined by $2x + 6y < 4$	<p><u>Chapter 4: Graphing Linear Equations & Functions</u> Lesson 4.2, TE pp. 210-215 Lesson 4.3, TE pp. 216-221 Lesson 4.4, TE pp. 222-227 Lesson 4.5, TE pp. 229-235 Lesson 4.7, TE pp. 243-249 Lesson 4.8, TE pp. 252-258</p>
6.0	Students graph a linear equation and compute the x-and y-intercepts (e.g., graph $2x + 6y = 4$). They are also able to sketch the region defined by linear inequality (e.g., they sketch the region defined by $2x + 6y < 4$).	<p><u>Chapter 6: Solving Solving and Graphing Linear Enequalities</u> Lesson 6.8, TE pp. 367-373</p>
7.0	Students verify that a point lies on a line, given an equation of the line. Students are able to derive linear equations by using the point-slope formula.	<p><u>Chapter 5: Writing Linear Equations</u> Lesson 5.1, TE pp. 269-275 Lesson 5.2, TE pp. 278-284 Lesson 5.3, TE pp. 285-290</p>
8.0	Students understand the concepts of parallel lines and perpendicular lines and how those slopes are related. Students are able to find the equation of a line perpendicular to a given line that passes through a given point.	<p>Lesson 5.4, TE pp. 291-297 Lesson 5.6, TE pp. 306-312</p> <p>UNIT 2 COMPETENCY ASSESSMENT</p>
UNIT 3 – (3 days/13.5 hours)		
9.0	Students solve a system of two linear equations in two variables algebraically and are able to interpret the answer graphically. Students are able to solve a system of two linear inequalities in two variables and to sketch the solution sets.	<p><u>Chapter 7: Systems of Linear Equations & Inequalities</u> Lesson 7.1, TE pp. 389-394 Lesson 7.2, TE pp. 396-401 Lesson 7.3, TE pp. 402-408 Lesson 7.4, TE pp. 409-414 Lesson 7.5, TE pp. 417-422 Lesson 7.6, TE pp. 424-430</p> <p>UNIT 3 COMPETENCY ASSESSMENT</p>



REDLANDS UNIFIED SCHOOL DISTRICT

SCOPE & SEQUENCE: Algebra I *Summer School – Credit Recovery*

Semester: 2

Domain	Standard	Text Support
UNIT 4 (3.5 days/15.75 hours)		
2.0	Students understand and use such operations as taking the opposite, finding the reciprocal, taking a root, and raising to a fractional power. They understand and use the rules of exponents.	<u>Chapter 2: Properties of Real Numbers</u> Lesson 2.1, TE pp. 64-70
2.0	Students understand and use such operations as taking the opposite, finding the reciprocal, taking a root, and raising to a fractional power. They understand and use the rules of exponents.	<u>Chapter 8: Exponents and Exponential Functions</u> Lesson 8.1, TE pp. 443-448 Lesson 8.2, TE pp. 449-454
2.0	Students understand and use such operations as taking the opposite, finding a reciprocal, taking a root, and raising to a fractional power. They understand and use the rules of exponents.	<u>Chapter 9: Quadratic Equations and Functions</u> Lesson 9.2, TE pp. 505-510 Lesson 9.3, TE pp. 511-517
10.0	Students add, subtract, multiply, and divide monomials and polynomials. Students solve multistep problems, including word problems, by using these techniques.	<u>Chapter 10: Polynomials and Factoring</u> Lesson 10.1, TE pp. 568-573 Lesson 10.2, TE pp. 511-517
2.0	Students understand and use such operations as taking the opposite, finding the reciprocal, taking a root, and raising to a fractional power. They understand and use the rules of exponents.	<u>Lesson 12: Radicals</u> Lesson 12.2, TE pp. 698-703 Lesson 12.3, TE pp. 704-709 Lesson 12.4, TE pp. 710-714
UNIT 4 COMPETENCY ASSESSMENT		

Domain	Standard	Text Support
UNIT 5 – (4 days/18 hours)		
20.0	Students use the quadratic formula to find the roots of a second-degree polynomials and to solve quadratic equations.	<u>Chapter 9: Quadratic Equations and Functions</u> Lesson 9.4, TE pp. 520-525 Lesson 9.5, TE pp. 526-531 Lesson 9.6, TE pp. 533-539
21.0	Students graph quadratic functions and know that their roots are the x- intercepts.	
23.0	Students apply quadratic equations to physical problems, such as the motion of an object under the force of gravity.	
14.0	Students solve a quadratic equation by factoring or completing the square.	<u>Chapter 10: Polynomials and Factoring</u> Lesson 10.4, TE pp. 588-593 Lesson 10.5, TE pp. 595-601 Lesson 10.6, TE pp. 603-608 Lesson 10.7, TE pp. 609-615
23.0	Students apply quadratic equations to physical problems, such as motion of an object under the force of gravity.	
14.0	Students solve a quadratic equation by factoring or completing the square.	<u>Chapter 12: Radicals</u> Lesson 12.5, TE pp. 716-721
23.0	Students apply quadratic equations to physical problems, such as the motion of an object under the force of gravity.	
UNIT 5 COMPETENCY ASSESSMENTS		
UNIT 6 – (4.5 days/20.25 hours)		
12.0	Students simplify fractions with polynomials in the numerator and denominator by factoring both and reducing them to the lowest terms.	<u>Chapter 11: Rational Expressions and Equations</u> Lesson 11.3, TE pp. 646-651 Lesson 11.4, TE pp. 652-657 Lesson 11.5, TE pp. 658-662 Lesson 11.6, TE pp. 663-669 Lesson 11.7, TE pp. 670-677
13.0	Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems by using these techniques.	
15.0	Students apply algebraic techniques to solve rate problems, work problems, and percent mixture problems.	
UNIT 6 COMPETENCY ASSESSMENT		