

Glencoe/McGraw-Hill

Pacing and Correlation

Glencoe *Algebra 1, Volume Two* to the California Mathematics Academic Content Standards, Algebra 1

The total number of days in the suggested Pacing is 170 including 4 days per chapter for reviewing and testing. This allows for teacher flexibility in planning due to testing, school cancellation, or shortened class periods.

*Pacing Legend:














Key = This lesson directly addresses a key California Math Standard as identified in the California Mathematics Framework.

















Basic = This lesson directly addresses a California Math Standard.

Prerequisite = This lesson addresses a prerequisite skill students will need in order to master a California Math Standard.

Optional = This lesson does not directly address any California Math Standard.

| Student Edition Lesson | Standard | Pacing* | |
|------------------------|-----------------------------|----------------|----------------|
| | | Type of Lesson | Number of Days |
| Chapter B | | | |
| Review 1-1 and 1-2 | 2, 24.1 | Prerequisite | 1 |
| Review 1-3 and 1-4 | 2, 25.2 | Prerequisite | 1 |
| Review 1-5 and 1-6 | 1.1, 2, 4, 24.2, 25.2 | Prerequisite | 1 |
| Review 1-7 and 1-8 | 1.1, 24.3, 25.1, 25.2, 25.3 | Prerequisite | 1 |
| Review 1-9 | 17 | Prerequisite | 1 |
| Review 2-1 and 2-2 | | Prerequisite | 1 |
| Review 2-3 and 2-4 | 1.1, 2 | Prerequisite | 1 |
| Review 2-5 and 2-6 | 1.1, 24.3, 25.1 | Prerequisite | 1 |
| Review 2-7 and 2-8 | 1.1, 2 | Prerequisite | 1 |
| Review 2-9 | | Prerequisite | 1 |
| Review 3-1 and 3-2 | 1.1 | Prerequisite | 1 |
| Review 3-3 and 3-4 | 1.1, 4, 5, 25.2, 25.3 | Prerequisite | 1 |
| Review 3-5 and 3-6 | 1.1, 4, 5, 25.2 | Prerequisite | 1 |
| Review 3-7 | | Prerequisite | 1 |
| Review 4-1 and 4-2 | | Prerequisite | 1 |
| Review 4-3 and 4-4 | | Prerequisite | 1 |
| Review 4-5 and 4-6 | | Prerequisite | 1 |
| Review 4-7 and 4-815 | | Prerequisite | 1 |
| Review 5-1 and 5-2 | 16, 17 | Prerequisite | 1 |
| Review 5-3 and 5-4 | 6, 17 | Prerequisite | 1 |
| Review 5-5 and 5-6 | 16, 18, 24.3, 25.1 | Prerequisite | 1 |
| Review 5-7 | | Prerequisite | 1 |

| Student Edition Lesson | Standard | Pacing* | |
|------------------------|---|---|----------------|
| | | Type of Lesson | Number of Days |
| Review 6-1 and 6-2 | 7, 25.1 | Prerequisite | 1 |
| Review 6-3 and 6-4 | 5, 6, 7 | Prerequisite | 1 |
| Review 6-5 and 6-6 | 2, 5, 6, 7, 8, 24.3 | Prerequisite | 1 |
| Review 6-7 | | Prerequisite | 1 |
| Review 7-1 and 7-2 | 1.1, 24.3 | Prerequisite | 1 |
| Review 7-3 and 7-4 | 4, 5 | Prerequisite | 1 |
| Review 7-5 and 7-6 | 3, 25.3 | Prerequisite | 1 |
| Review 7-7 and 7-8 | 6 | Prerequisite | 1 |
| Chapter 8 | Solving Systems of Linear Equations and Inequalities | | |
| 8-1A | | Prerequisite | 1 |
| 8-1 | 8, 9 | Key  | 2 |
| 8-2 | 9 | Key  | 2 |
| 8-3 | 9 | Key  | 2 |
| 8-4 | 9 | Key  | 2 |
| 8-5 | 9 | Key  | 2 |
| Reviewing and Testing | | | 4 |
| Chapter 9 | Exploring Polynomials | | |
| 9-1 | 2, 10, 25.1 | Key  | 2 |
| 9-2 | 2, 10, 25.1 | Key  | 2 |
| 9-3 | | Optional | 2 |
| 9-4A | | Prerequisite | 1 |
| 9-4 | | Prerequisite | 2 |
| 9-5A | 10 | Key  | 1 |
| 9-5 | 2, 10 | Key  | 2 |
| 9-6A | 10 | Key  | 1 |
| 9-6 | 10 | Key  | 2 |
| 9-7A | | Prerequisite | 1 |
| 9-7 | 10 | Key  | 2 |
| 9-8 | 10 | Key  | 2 |
| Reviewing and Testing | | | 4 |
| Chapter 10 | Using Factoring | | |
| 10-1 | 11, 25.1 | Basic | 2 |
| 10-2A | | Prerequisite | 1 |
| 10-2 | 11 | Basic | 2 |
| 10-3A | | Prerequisite | 1 |
| 10-3 | 11 | Basic | 2 |
| 10-4 | 11 | Basic | 2 |
| 10-5 | 11 | Basic | 2 |

| Student Edition Lesson | Standard | Pacing* | |
|------------------------|--|---|----------------|
| | | Type of Lesson | Number of Days |
| 10-6 | 11, 14, 23 | Key  | 2 |
| Reviewing and Testing | | | 4 |
| Chapter 11 | Exploring Quadratic and Exponential Functions | | |
| 11-1A | | Prerequisite | 1 |
| 11-1 | 17, 23, 25.1 | Key  | 2 |
| 11-1B | | Optional | 1 |
| 11-2 | 14, 21, 22, 25.1 | Key  | 2 |
| 11-3 | 14, 17, 19, 20, 21, 22 | Key  | 2 |
| 11-4A | | Prerequisite | 1 |
| 11-4 | 14 | Key  | 2 |
| 11-5 | | Optional | 2 |
| Reviewing and Testing | | | 4 |
| Chapter 12 | Exploring Rational Expressions and Equations | | |
| 12-1 | 11, 12 | Key  | 2 |
| 12-1B | | Optional | 1 |
| 12-2 | 11, 12, 13 | Key  | 2 |
| 12-3 | 11, 12, 13 | Key  | 2 |
| 12-4 | 10, 11, 12 | Key  | 2 |
| 12-5 | 2, 11, 12, 13 | Key  | 2 |
| 12-6 | 11, 12, 13 | Key  | 2 |
| 12-7 | 11, 12, 13 | Key  | 2 |
| 12-8 | 11, 12, 15 | Key  | 2 |
| Reviewing and Testing | | | 4 |
| Chapter 13 | Exploring Radical Expressions and Equations | | |
| 13-1A | | Prerequisite | 1 |
| 13-1 | 25.1 | Basic | 2 |
| 13-2 | 25.1, 25.2 | Basic | 2 |
| 13-2B | | Optional | 1 |
| 13-3 | | Prerequisite | 2 |
| 13-4 | 14 | Key  | 2 |
| 13-5 | 14 | Key  | 2 |
| 13-6A | | Prerequisite | 1 |
| 13-6 | 14, 19, 23 | Key  | 2 |
| Reviewing and Testing | | | 4 |









Glencoe/McGraw-Hill

Correlation

The California Mathematics Academic Content Standards
Algebra 1 to Glencoe *Algebra 1, Volume Two*

| STANDARDS | LESSON REFERENCES |
|--|---|
| 1. Students identify and use the arithmetic properties of subsets of integers, rational, irrational and real numbers. This includes closure properties for the four basic arithmetic operations where applicable. | |
| 1.1 Students use properties of numbers to demonstrate that assertions are true or false. | 7-2 |
| 2. Students understand and use such operations as taking the opposite, reciprocal, raising to a power, and taking a root. This includes the understanding and use of the rules of exponents. | 9-1, 9-2, 9-5, 12-5 |
| 3. Students solve equations and inequalities involving absolute values. | 7-6 |
| 4. Students simplify expressions prior to solving linear equations and inequalities in one variable such as $3(2x - 5) + 4(x - 2) = 12$. | 7-3 |
| 5. Students solve multi-step problems, including word problems, involving linear equations and linear inequalities in one variable, with justification of each step. | 7-3, 7-4 |
| 6. 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., sketch the region defined by $2x + 6y < 4$). | 7-8 |
| 7. Students verify that a point lies on a line given an equation of the line. Students are able to derive linear equations using the point-slope formula. | See Glencoe's <i>Algebra 1, Year 1 California Lesson Planning Guide</i> . |
| 8. Students understand the concepts of parallel and perpendicular lines and how their slopes are related. Students are able to find the equation of a line perpendicular to a given line that passes through a given point. | 8-1 |
| 9. Students solve a system of two linear equations in two variables algebraically, and are able to interpret the answer graphically. Students are able to use this to solve a system of two linear inequalities in two variables, and to sketch the solution sets. | 8-1, 8-2, 8-3, 8-4, 8-5 |
| 10. Students add, subtract, multiply and divide monomials and polynomials. Students solve multistep problems, including word problems, using these techniques. | 9-1, 9-2, 9-5A, 9-5, 9-6A, 9-6, 9-7, 9-8, 12-4 |

 = Key Standard

| STANDARDS | LESSON REFERENCES |
|--|--|
| 11. Students apply basic factoring techniques to second and simple third degree polynomials. These techniques include finding a common factor to all of the terms in a polynomial and recognizing the difference of two squares, and recognizing perfect squares of binomials. | 10-1, 10-2, 10-3, 10-4, 10-5, 10-6, 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8 |
|  12. Students simplify fractions with polynomials in the numerator and denominator by factoring both and reducing to lowest terms. | 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, 12-7, 12-8 |
|  13. Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems using these techniques. | 12-2, 12-3, 12-5, 12-6, 12-7 |
|  14. Students solve a quadratic equation by factoring or completing the square. | 10-6, 11-2, 11-3, 11-4, 13-4, 13-5, 13-6 |
|  15. Students apply algebraic techniques to rate problems, work problems, and percent mixture problems. | 12-8 |
| 16. Students understand the concepts of a relation and a function, determine whether a given relation defines a function, and give pertinent information about given relations and functions. | See Glencoe's <i>Algebra 1, Year 1 California Lesson Planning Guide</i> . |
| 17. Students determine the domain of independent variables, and range of dependent variables defined by a graph, a set of ordered pairs, or symbolic expression. | 11-1, 11-3 |
| 18. Students determine whether a relation defined by a graph, a set of ordered pairs, or symbolic expression is a function and justify the conclusion. | See Glencoe's <i>Algebra 1, Year 1 California Lesson Planning Guide</i> . |
|  19. Students know the quadratic formula and are familiar with its proof by completing the square. | 11-3, 13-6 |
|  20. Students use the quadratic formula to find the roots of a second degree polynomial and to solve quadratic equations. | 11-3 |
|  21. Students graph quadratic functions and know that their roots are the x-intercepts. | 11-2, 11-3 |
| 22. Students use the quadratic formula and/or factoring techniques to determine whether the graph of a quadratic function will intersect the x-axis in zero, one, or two points. | 11-2, 11-3 |
|  23. Students apply quadratic equations to physical problems such as the motion of an object under the force of gravity. | 10-6, 11-1, 13-6 |
| 24. Students use and know simple aspects of a logical argument. | |
| 24.1 Students explain the difference between inductive and deductive reasoning and identify and provide examples of each. | See Glencoe's <i>Algebra 1, Year 1 California Lesson Planning Guide</i> . |

 = Key Standard

| STANDARDS | LESSON REFERENCES |
|--|--|
| 24.2 Students identify the hypothesis and conclusion in logical deduction. | <i>See Glencoe's Algebra 1, Year 1 California Lesson Planning Guide.</i> |
| 24.3 Students use counterexamples to show that an assertion is false and recognize that a single counterexample is sufficient to refute an assertion. | 7-2 |
| 25. Students use properties of the number system to judge the validity of results, to justify each step of a procedure and to prove or disprove statements. | |
| 25.1 Students use properties of numbers to construct simple valid arguments (direct and indirect) for, or formulate counterexamples to, claimed assertions. | 9-1, 9-2, 10-1, 11-1, 11-2, 13-1, 13-2 |
| 25.2 Students judge the validity of an argument based on whether the properties of the real number system and order of operations have been applied correctly at each step. | 13-2 |
| 25.3 Given a specific algebraic statement involving linear, quadratic or absolute value expressions, equations or inequalities, students determine if the statement is true sometimes, always, or never. | <i>See Glencoe's Algebra 1, Year 1 California Lesson Planning Guide.</i> |

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