

Scope and Sequence
Algebra I A,B,C (High School)

Overview: Successful completion of Algebra IA, Algebra IB, and Algebra IC (grade of "D" or higher) meets the State of Idaho's high school graduation requirement of at least one year of algebra. The course covers topics of evaluating expressions, using function notation, solving linear and quadratic equations, graphing linear, quadratic, and exponent functions, and other topics of a first year algebra course.

Book: Algebra I @2010
Glencoe McGraw-Hill

Algebra I A
Chapters 1, 2, and 3

Chapter 1 (approximately 15 days)

Section	Topic	Common Core State Standards
1-1	Variables and Expressions	A.SSE.1a, ASSE.2
1-2	Order of Operations	A.SSE.1b, A.SSE.2
1-3	Properties of Numbers	A.SSE.1b, A.SSE.2
1-4	The Distributive Property	A.SSE.1, A.SSE.2
1-5	Equations	A.CED.1, A.REL.3
1-6	Relations	A.REL.10, F.IF.1
1-7	Functions	F.IF.1, F.IF.2
1-8	Interpreting Graphs of Functions	F.IF.4

Chapter 2 (approximately 15 days)

Section	Topic	Common Core State Standards
2-1	Writing Equations	A.CED.1
2-2	Solving One-Step Equations	A.REL.1, A.REL.3
2-3	Solving Mult-Step Equations	A.REL.1, A.REL.3
2-4	Solving Equations with the Variable on Each Side	A.REL.1, A.REL.3
2-5	Solving Equations involving Absolute Value	A.REL.1, A.REL.3
2-6	Ratios and Proportions	A.REL.1, A.REL.3
2-7	Percent of Change	N.Q.1, A.REL.3
2-8	Literal Equations and Dimensional Analysis	A.CED.4, A.REL.3
2-9	Weighted Averages	A.REL.1, A.REL.3

Chapter 3 (approximately 12 days)

Section	Topic	Common Core State Standards
3-1	Graphing Linear Equations	F.IF.4
3-2	Solving Linear Equations by Graphing	A.REI.10, F.IF.7a
3-3	Rate of Change and Slope	F.IF.6, F.LE.1a
3-4	Direct Variation	A.REI.10, F.IF.7a
3-5	Arithmetic Sequences as Linear Functions	F.LE.1b, F.LE.2
3-6	Proportional and Nonproportional Relationships	F.LE.1b, F.LE.2

Algebra IB

Chapter 4 (Sections 1-5), Chapter 5, Chapter 6 (Sections 1-4), and Chapter 7

Chapter 4 (approximately 12 days)

Section	Topic	Common Core State Standards
4-1	Graphing Equations in Slope-Intercept Form	F.IF.7a, S.ID.7
4-2	Writing Equations in Slope-Intercept Form	F.BF.1, F.LE.2
4-3	Writing Equations in Point-Slope Form	F.IF.2, F.LE.2
4-4	Parallel and Perpendicular Lines	F.LE.2, S.ID.7
4-5	Scatter Plots and Lines of Fit	S.ID.6a, S.ID.6c

Chapter 5 (approximating 12 days)

Sections	Topic	Common Core State Standards
5-1	Solving Inequalities by Addition and Subtraction	A.CED.1, A.REI.3
5-2	Solving Inequalities by Multiplication and Division	A.CED.1, A.REI.3
5-3	Solving Multi-Step Inequalities	A.CED.1, A.REI.3
5-4	Solving Compound Inequalities	A.CED.1, A.REI.3
5-5	Inequalities Involving Absolute Value	A.CED.1, REI.3
5-6	Graphing Inequalities in Two Variables	A.CED.3, A.REI.12

Chapter 6 (approximately 10 days)

Section	Topic	Common Core State Standards
6-1	Graphing Systems of Equations	A.CED.3, A.REI.6
6-2	Substitution	A.CED.3, A.REI.6
6-3	Elimination Using Addition and Subtraction	A.CED.2, A.REI.6
6-4	Elimination Using Multiplication	A.REI.5, A.REI.6

Chapter 7 (approximately 12 days)

Section	Topic	Common Core State Standards
7-1	Multiplying Monomials	A.SSE.2, F.IF.8b
7-2	Dividing Monomials	A.SSE.2, F.IF.8b
7-3	Scientific Notation	A.SSE.2
7-4	Polynomials	A.SSE.1a
7-5	Adding and Subtracting Polynomials	A.APR.1
7-6	Multiplying a Polynomial by a Monomial	A.APR.1
7-7	Multiplying Polynomials	A.APR.1
7-8	Special Products	A.APR.1

Algebra IC

Chapter 8, Chapter 9(except 9-4), Chapter 12(Sections 1-5)

Chapter 8 (approximately 12 days)

Section	Topic	Common Core State Standards
8-1	Monomials and Factoring	A.SSE.2
8-2	Using the Distributive Property	A.SSE.2, A.SSE.3a
8-3	Quadratic Equations: $x^2 + bx + c$	A.SSE.3a, A.REI.4b
8-4	Quadratic Equations: $ax^2 + bx + c$	A.SSE.3a, A.REI.4b
8-5	Quadratic Equations: Difference of Squares	A.SSE.3a, A.REI.4b
8-6	Quadratic Equations: Perfect Squares	A.SSE.3a, A.REI.1

Chapter 9 (approximately 16 days)

Section	Topic	Common Core State Standards
9-1	Graphing Quadratic Functions	F.IF.4, F.IF.7a
9-2	Solving Quadratic Equations by Graphing	A.REI.4b, F.IF.7a
9-3	Transformations of Quadratic Functions	A.SSE.3b, F.IF.7a
9-5	Solving Quadratic Equations by Using the Quadratic Formula	A.REI.4
9-6	Exponential Functions	F.IF.7e, F.LE.2
9-7	Growth and Decay	F.IF.8b, F.LE.2
9-8	Geometric Sequences as Exponential Functions	F.BF.2, F.LE.1
9-9	Analyzing Functions with Differences and Ratios	F.IF.6, F.LE.1

Chapter 12 (approximately 10 days)

Section	Topics	Common Core State Standards
12-1	Designing a Survey	
12-2	Analyzing Survey Results	
12-3	Statistics and Parameters	S.ID.2
12-4	Permutations and Combinations	
12-5	Probability of Compound Events	S.ID.5