

Pre-Algebra Standard Lesson Plan Overview

This Standard Lesson Plan allocates 90 days for each semester.

Test Packet, supplementary material to *Student Text* and *Teacher's Edition*

Student Activities, supplementary material to *Student Text* and *Teacher's Edition*

Teacher's Toolkit CD, included in *Teacher's Edition*

* Bible Integration topics covered in the *Teacher's Edition* or *Student Activities*

Day	Topic	Pages	Support Materials	Bible Integration
Chapter 1: Integers				
1	Introduction	viii–ix		<ul style="list-style-type: none"> Christian responsibilities demonstrating Christian love
2	1.1 Opposites and Absolute Value	xvi–5		<ul style="list-style-type: none"> illustrations of opposites in the Bible
3	1.2 Adding Integers	6–9	<ul style="list-style-type: none"> Sum Circles 	
4	1.3 Subtracting Integers	10–13	<ul style="list-style-type: none"> Quiz 1 (1.1–1.2) Adding and Subtracting Integers 	
5	Math in Use— Josephine Baker 1.4 Multiplying Integers	14–19	<ul style="list-style-type: none"> Clock Arithmetic 	
6	1.5 Dividing Integers	19–22	<ul style="list-style-type: none"> Quiz 2 (1.3–1.4) Multiplying and Dividing Integers 	
7	1.6 Exponents	23–28		
8	Problem Solving— Introduction	29–30	<ul style="list-style-type: none"> Quiz 3 (1.5–1.6) Problem Solving 	
9	1.7 Order of Operations	31–35	<ul style="list-style-type: none"> Calculator Skill 1 	<ul style="list-style-type: none"> God delights in orderliness
10	1.8 Scientific Notation	35–38	<ul style="list-style-type: none"> Creation Wonders— Revelation of Stars 	<ul style="list-style-type: none"> God's revelation through nature*
11	Math & Scripture— Daniel's Influence	39	<ul style="list-style-type: none"> Quiz 4 (1.7–1.8) 	<ul style="list-style-type: none"> Infinite Truths Daniel's understanding and wisdom
12	Chapter 1 Review	40–41	<ul style="list-style-type: none"> Mathardy: Ch. 1 Chapter 1 Review Cumulative Review 1 	
13	Chapter 1 Test			

Chapter 2: Expressions				
14	2.1 Properties of Addition	42–49	<ul style="list-style-type: none"> • Properties of Addition 	<ul style="list-style-type: none"> • glorifying God in your body • the golden rule • practical biblical principles*
15	Math in Use—Joseph	50	<ul style="list-style-type: none"> • Creation Wonders—Invisible Things 	<ul style="list-style-type: none"> • God’s providence • accepting Creation by faith*
16	2.2 Properties of Multiplication	51–55	<ul style="list-style-type: none"> • Properties of Multiplication 	
17	2.3 Distributive Property	55–58	<ul style="list-style-type: none"> • Quiz 1 (2.1–2.2) • Distributive Property 	
18	2.4 Evaluating Expressions	59–62	<ul style="list-style-type: none"> • Algebraic Proofs • Calculator Skill 2 	
19	2.5 Simplifying Expressions	62–66	<ul style="list-style-type: none"> • Quiz 2 (2.3–2.4) 	
20	Problem Solving—Select the Operations	67–68	<ul style="list-style-type: none"> • Problem Solving—Select the Operation 	
21	2.6 Translating Word Phrases	69–73		
22	2.7 Estimating	74–78	<ul style="list-style-type: none"> • Left-to-Right Mental Arithmetic 	
23	Math & Scripture—Joseph’s On-the-Job Training	79	<ul style="list-style-type: none"> • Quiz 3 (2.5–2.7) 	<ul style="list-style-type: none"> • Infinite Truths • Joseph’s preparation for Egypt’s famine
24	Chapter 2 Review	80–81	<ul style="list-style-type: none"> • Mathardy: Ch. 2 • Chapter 2 Review • Cumulative Review 2 	
25	Chapter 2 Test			

Chapter 3: Basic Equations and Inequalities				
26	3.1 Solving Equations by Adding or Subtracting	82–90	<ul style="list-style-type: none"> • Creation Wonders—Earth 	<ul style="list-style-type: none"> • meeting the needs of others • God's handiwork*
27	Problem Solving—Guess and Check	91–92	<ul style="list-style-type: none"> • Problem Solving—Guess and Check 	
28	3.2 Solving Equations by Multiplying or Dividing	93–98	<ul style="list-style-type: none"> • Lattice Squares 	
29	3.3 Solving Two-Step Equations	98–104	<ul style="list-style-type: none"> • Equations: Working Backwards 	
30	3.1–3.3 Review		<ul style="list-style-type: none"> • Quiz 1 (3.1–3.3) 	
31	3.4 Simplifying Before Solving	104–8	<ul style="list-style-type: none"> • Simplifying Before Solving 	
32	Math in Use—David 3.5 Using Equations	109–15	<ul style="list-style-type: none"> • Calculator Skill 3 	<ul style="list-style-type: none"> • a man after God's own heart
33	3.6 Sets of Numbers and Inequalities	115–19	<ul style="list-style-type: none"> • Quiz 2 (3.4–3.5) 	
34	3.7 Solving Linear Inequalities	120–25		
35	3.8 Using Inequalities	126–30		
36	Math & Scripture—King David's Unwise Census	131	<ul style="list-style-type: none"> • Quiz 3 (3.6–3.8) 	<ul style="list-style-type: none"> • Infinite Truths • King David's numbering
37	Chapter 3 Review	132–33	<ul style="list-style-type: none"> • Mathardy: Ch. 3 • Chapter 3 Review • Cumulative Review 3 	
38	Chapter 3 Test			

Chapter 4: Number Theory				
39	4.1 Prime and Composite Numbers	134–41	<ul style="list-style-type: none"> Creation Wonders—The Flood Prime and Composite Numbers 	<ul style="list-style-type: none"> the universal Flood*
40	4.2 Prime Factorization	141–44	<ul style="list-style-type: none"> Perfect, Deficient, and Abundant Numbers 	<ul style="list-style-type: none"> proving all things
41	4.3 Greatest Common Factor	144–48	<ul style="list-style-type: none"> Quiz 1 (4.1–4.2) 	<ul style="list-style-type: none"> cleansing from sin
42	4.4 Least Common Multiple	148–52	<ul style="list-style-type: none"> GCF and LCM Calculator Skill 4 	
43	4.5 Arithmetic Sequences	152–58	<ul style="list-style-type: none"> Quiz 2 (4.3–4.4) 	<ul style="list-style-type: none"> Christ is our example
44	4.6 Geometric Sequences	158–61	<ul style="list-style-type: none"> Arithmetic and Geometric Sequences 	
45	4.5–4.6 Review		<ul style="list-style-type: none"> Quiz 3 (4.5–4.6) 	
46	Problem Solving—Look for a Pattern	162–64	<ul style="list-style-type: none"> Problem Solving—Patterns 	
47	4.7 Bases	165–69		
48	Math in Use—Daniel 4.8 Operations in Bases	170–74		<ul style="list-style-type: none"> prophecy of the seventy weeks
49	Math & Scripture—Daniel's Seventy Weeks	175	<ul style="list-style-type: none"> Quiz 4 (4.7–4.8) 	<ul style="list-style-type: none"> Infinite Truths accuracy of Scripture verified through fulfilled prophecy*
50	Chapter 4 Review	176–77	<ul style="list-style-type: none"> Mathardy: Ch. 4 Chapter 4 Review Cumulative Review 4 	
51	Chapter 4 Test			

Chapter 5: Rational Numbers				
52	5.1 Forms of Rational Numbers	178–85	<ul style="list-style-type: none"> • Creation Wonders—Trees • Rational Number Forms 	<ul style="list-style-type: none"> • practical and symbolic uses of trees in the Bible* • finite life, eternal life
53	5.2 Comparing Rational Numbers	186–91		
54	Problem Solving—Draw a Picture	192–93	<ul style="list-style-type: none"> • Quiz 1 (5.1–5.2) • Problem Solving—Make a Sketch 	
55	5.3 Decimal Equivalents	194–98	<ul style="list-style-type: none"> • Patterns with Fractions • Calculator Skill 5 	
56	5.4 Ratio and Rate	198–202		
57	5.5 Proportions	202–7	<ul style="list-style-type: none"> • Quiz 2 (5.3–5.4) • Solving Problems Using Proportions 	
58	Math in Use—Eleazar 5.6 Real Numbers	208–14	<ul style="list-style-type: none"> • Pascal's Triangle 	<ul style="list-style-type: none"> • Eleazar's obedience
59	Math & Scripture—Math and the Priests	215	<ul style="list-style-type: none"> • Quiz 3 (5.5–5.6) 	<ul style="list-style-type: none"> • Infinite Truths • fractions used in the Bible • biblical units of volume for dry measure
60	Chapter 5 Review	216–17	<ul style="list-style-type: none"> • Mathardy: Ch. 5 • Chapter 5 Review • Cumulative Review 5 	
61	Chapter 5 Test			

Chapter 6: Operations on Rational Numbers				
62	6.1 Addition and Subtraction	218–25	<ul style="list-style-type: none"> • Addition and Subtraction of Rational Numbers 	
63	6.2 Multiplication	226–30	<ul style="list-style-type: none"> • Multiplication of Fractions 	
64	Math in Use— John Philip Sousa	231	<ul style="list-style-type: none"> • Quiz 1 (6.1–6.2) • Creation Wonders—Whales 	<ul style="list-style-type: none"> • Jonah and the great fish*
65	6.3 Division	232–36	<ul style="list-style-type: none"> • Multiplication and Division of Rational Numbers 	
66	6.4 Evaluating Algebraic Expressions	237–40	<ul style="list-style-type: none"> • Pascal's Triangle and Fractions 	
67	6.5 Simplifying Algebraic Expressions	240–44	<ul style="list-style-type: none"> • Quiz 2 (6.3–6.4) 	
68	6.6 Solving Equations with Rational Numbers	244–47		
69	Problem Solving— Divide and Conquer	248–49	<ul style="list-style-type: none"> • Quiz 3 (6.5–6.6) • Problem Solving—Divide and Conquer 	
70	6.7 Using Algebra	250–54		
71	6.8 Operations with Scientific Notation	254–58	<ul style="list-style-type: none"> • Calculator Skill 6 	
72	Math & Scripture— The Wilderness Tabernacle	259	<ul style="list-style-type: none"> • Quiz 4 (6.7–6.8) 	<ul style="list-style-type: none"> • Infinite Truths • God's detailed designs • a perfect sacrifice*
73	Chapter 6 Review	260–61	<ul style="list-style-type: none"> • Mathardy: Ch. 6 • Chapter 6 Review • Cumulative Review 6 	
74	Chapter 6 Test			

Chapter 7: Percents				
75	7.1 Forms of Percents	262–69	<ul style="list-style-type: none"> • Visualizing Percent 	<ul style="list-style-type: none"> • the virtuous woman
76	7.2 Solving Percent Equations	269–74	<ul style="list-style-type: none"> • Solving Basic Percent Equations 	
77	Problem Solving—Mixed Review	275	<ul style="list-style-type: none"> • Quiz 1 (7.1–7.2) 	
78	7.3 Using Percents	276–80	<ul style="list-style-type: none"> • Creation Wonders—The Bat • Scale Drawings 	<ul style="list-style-type: none"> • biblical references to bats*
79	7.4 Scales	281–86	<ul style="list-style-type: none"> • Scale Drawings 	
80	Math in Use—Julia Morgan	287	<ul style="list-style-type: none"> • Quiz 2 (7.3–7.4) 	
81	7.5 Discount and Markup	288–92	<ul style="list-style-type: none"> • Problem Solving—Percents 	
82	7.6 Commissions and Tips	292–96	<ul style="list-style-type: none"> • Graduated Commission 	
83	7.7 Interest	297–302	<ul style="list-style-type: none"> • Quiz 3 (7.5–7.6) • Calculator Skill 7 	
84	7.8 Percent Change	302–6		
85	Math & Scripture—Solomon’s Temple	307	<ul style="list-style-type: none"> • Quiz 4 (7.7–7.8) 	<ul style="list-style-type: none"> • Infinite Truths • the temple as a pattern of heavenly things* • the tearing of the veil*
86	Chapter 7 Review	308–9	<ul style="list-style-type: none"> • Mathardy: Ch. 7 • Chapter 7 Review • Cumulative Review 7 	
87	Chapter 7 Test			
88	Review for Final Exam			
89	Review for Final Exam			
90	Final Exam (Chapters 1–7)			

Chapter 8: Applying Equations and Inequalities				
91	8.1 Simplifying Equations	310–16	<ul style="list-style-type: none"> Creation Wonders—The Human Cell 	<ul style="list-style-type: none"> God's handiwork fearfully and wonderfully made*
92	Math in Use—Moses 8.2 Variables on Both Sides	317–22	<ul style="list-style-type: none"> Simplifying—Variables on Two Sides Equation Versus Identity 	<ul style="list-style-type: none"> the wisdom of Moses the meekness of Moses
93	8.3 Applying Equations	323–28	<ul style="list-style-type: none"> Calculator Skill 8 	
94	Problem Solving—Write an Equation	329–30	<ul style="list-style-type: none"> Quiz 1 (8.1–8.3) Art and Design 	
95	8.4 Solving Inequalities	331–35		
96	8.5 Applying Inequalities	335–40	<ul style="list-style-type: none"> Problem Solving—Equations and Inequalities 	
97	Math & Scripture—Ezekiel's Temple Vision	341	<ul style="list-style-type: none"> Quiz 2 (8.4–8.5) 	<ul style="list-style-type: none"> Infinite Truths God's holiness and glory
98	Chapter 8 Review	342–43	<ul style="list-style-type: none"> Mathardy: Ch. 8 Chapter 8 Review Cumulative Review 8 	
99	Chapter 8 Test			

Chapter 9: Relations and Functions				
100	9.1 The Coordinate Plane	344–49	<ul style="list-style-type: none"> Graphing 	
101	9.2 Relations	350–54		<ul style="list-style-type: none"> receiving Christ and becoming sons of God
102	Problem Solving— Make a Table	355–56	<ul style="list-style-type: none"> Quiz 1 (9.1–9.2) 	
103	9.3 Functions	357–61		
104	Math in Use— Benjamin Banneker	362	<ul style="list-style-type: none"> Creation Wonders— The Human Eye Poinsot Stars 	<ul style="list-style-type: none"> the blessing of God’s gift of sight
105	9.4 Graphing Linear Functions	363–67		<ul style="list-style-type: none"> God’s plumb line in Israel
106	9.5 Slope	368–73	<ul style="list-style-type: none"> Quiz 2 (9.3–9.4) 	
107	9.6 Slope-Intercept Form	373–78	<ul style="list-style-type: none"> Graphing Linear Functions 	
108	9.7 Direct Variations	378–83	<ul style="list-style-type: none"> Quiz 3 (9.5–9.6) Direct Variation 	<ul style="list-style-type: none"> consistency of seasonal changes
109	9.8 Graphing Linear Inequalities	383–86	<ul style="list-style-type: none"> Problem Solving— Function Applications 	
110	Math & Scripture— Stewardship of Wealth	387	<ul style="list-style-type: none"> Quiz 4 (9.7–9.8) Calculator Skill 9 	<ul style="list-style-type: none"> Infinite Truths being good stewards of physical and spiritual wealth
111	Chapter 9 Review	388–89	<ul style="list-style-type: none"> Mathardy: Ch. 9 Chapter 9 Review Cumulative Review 9 	
112	Chapter 9 Test			

Chapter 10: Statistics and Probability				
113	10.1 Statistical Measures	390–97	<ul style="list-style-type: none"> • Creation Wonders—The Human Ear 	<ul style="list-style-type: none"> • hearing the Word of God*
114	10.2 Diagramming Data	397–404		
115	10.3 Histograms	404–10	<ul style="list-style-type: none"> • Quiz 1 (10.1–10.2) 	
116	10.4 Graphing Data	411–17	<ul style="list-style-type: none"> • Statistical Sampling 	
117	Problem Solving—Make a Graph	418–19	<ul style="list-style-type: none"> • Quiz 2 (10.3–10.4) • Problem Solving—Using Graphs 	
118	10.5 Fundamental Principle of Counting	420–24		
119	10.6 Permutations	424–28		
120	10.7 Combinations	429–32	<ul style="list-style-type: none"> • Calculator Skill 10 • Combinations 	
121	10.5–10.7 Review		<ul style="list-style-type: none"> • Quiz 3 (10.5–10.7) 	
122	10.8 Probability Math in Use—Gideon	432–38		<ul style="list-style-type: none"> • Gideon’s doubt • Gideon’s trust
123	10.9 Independent and Dependent Events	439–43		
124	Math & Scripture—Gideon’s Big Task	444	<ul style="list-style-type: none"> • Quiz 4 (10.8–10.9) 	<ul style="list-style-type: none"> • Infinite Truths • Gideon’s army
125	Chapter 10 Review	445–47	<ul style="list-style-type: none"> • Mathardy: Ch. 10 • Chapter 10 Review • Cumulative Review 10 	
126	Chapter 10 Test			

Chapter 11: Radicals				
127	11.1 Square Roots	448–54		<ul style="list-style-type: none"> man created in the image of God
128	Problem Solving— Work Backwards	455–56	<ul style="list-style-type: none"> Problem Solving— Working Backwards Numbers That Surprise 	
129	11.2 Radical Equations	457–61	<ul style="list-style-type: none"> Solving Equations Containing Radicals 	<ul style="list-style-type: none"> determining true Christians by their fruit
130	11.3 Equations with Exponents	461–64	<ul style="list-style-type: none"> Solving Equations Containing Exponents 	
131	11.1–11.3 Review		<ul style="list-style-type: none"> Quiz 1 (11.1–11.3) 	
132	11.4 The Pythagorean Theorem	465–68	<ul style="list-style-type: none"> Creation Wonders— The Human Heart 	<ul style="list-style-type: none"> keeping your heart with all diligence*
133	Math in Use— Bowditch 11.5 Products and Quotients of Radicals	469–74		<ul style="list-style-type: none"> the gospel
134	11.4–11.5 Review		<ul style="list-style-type: none"> Quiz 2 (11.4–11.5) 	
135	11.6 Sums and Differences of Radicals	475–78	<ul style="list-style-type: none"> Simplifying Radicals 	
136	11.7 Cube Roots	478–81	<ul style="list-style-type: none"> Cube Roots 	
137	Math & Scripture—The New Jerusalem	482	<ul style="list-style-type: none"> Quiz 3 (11.6–11.7) Calculator Skill 11 	<ul style="list-style-type: none"> Infinite Truths focusing on heaven*
138	Chapter 11 Review	483	<ul style="list-style-type: none"> Mathardy: Ch. 11 Chapter 11 Review Cumulative Review 11 	
139	Chapter 11 Test			

Chapter 12: Geometry				
140	12.1 Basic Geometric Figures	484–90	<ul style="list-style-type: none"> Figurate Numbers 	<ul style="list-style-type: none"> Noah's ark Noah's faith
141	12.2 Pairs of Angles	491–96	<ul style="list-style-type: none"> Angles Geometric Proofs 	
142	Problem Solving—Organize Data with Diagrams	497–99	<ul style="list-style-type: none"> Quiz 1 (12.1–12.2) Problem Solving—Tables and Venn Diagrams 	
143	12.3 Polygons	500–507	<ul style="list-style-type: none"> Calculator Skill 12 	
144	12.4 Perimeter and Circumference	508–13	<ul style="list-style-type: none"> Creation Wonders—The Human Brain 	<ul style="list-style-type: none"> all things created by Him
145	12.5 Congruence and Similarity	513–19	<ul style="list-style-type: none"> Quiz 2 (12.3–12.4) Congruence and Similarity 	<ul style="list-style-type: none"> following Christ's example
146	12.6 Special Right Triangles	520–25	<ul style="list-style-type: none"> Special Triangles 	
147	Math in Use—M. C. Escher	526	<ul style="list-style-type: none"> Quiz 3 (12.5–12.6) 	
148	12.7 Coordinate Geometry	527–31	<ul style="list-style-type: none"> Coordinate Geometry—Distance and Midpoint 	
149	12.8 Symmetry and Transformations	532–38		<ul style="list-style-type: none"> transformation by renewing of the mind
150	Math & Scripture—Building the Walls and Gates	539	<ul style="list-style-type: none"> Quiz 4 (12.7–12.8) 	<ul style="list-style-type: none"> the vision to build Infinite Truths
151	Chapter 12 Review	540–41	<ul style="list-style-type: none"> Mathardy: Ch. 12 Chapter 12 Review Cumulative Review 12 	
152	Chapter 12 Test			

Chapter 13: Area and Volume				
153	13.1 Areas of Parallelograms	542–48		<ul style="list-style-type: none"> considering the ways of the ant*
154	13.2 Areas of Triangles and Trapezoids	549–53	<ul style="list-style-type: none"> Areas 	
155	13.3 Areas of Circles	553–57	<ul style="list-style-type: none"> Quiz 1 (13.1–13.2) 	
156	13.4 Lengths and Areas of Similar Regions	557–61		
157	13.5 Surface Areas of Prisms and Cylinders	562–67	<ul style="list-style-type: none"> Quiz 2 (13.3–13.4) 	
158	13.6 Surface Areas of Pyramids, Cones, and Spheres	567–73	<ul style="list-style-type: none"> Surface Areas of Three-Dimensional Figures Deltahedra 	
159	13.5–13.6 Review		<ul style="list-style-type: none"> Quiz 3 (13.5–13.6) 	
160	Problem Solving—Use Multiple Strategies	574–75	<ul style="list-style-type: none"> Creation Wonders—Human Blood 	<ul style="list-style-type: none"> the cleansing blood of Christ*
161	13.7 Volumes of Prisms and Cylinders Math in Use—Ruth	576–81		<ul style="list-style-type: none"> Ruth’s loyalty and virtue
162	13.8 Volumes of Pyramids, Cones, and Spheres	582–86	<ul style="list-style-type: none"> Volumes of Three-Dimensional Figures Calculator Skill 13 	
163	Math & Scripture—God’s Wisdom and Noah’s Faithful Work	587	<ul style="list-style-type: none"> Quiz 4 (13.7–13.8) Problem Solving—Area and Volume 	<ul style="list-style-type: none"> Infinite Truths Noah’s testimony
164	Chapter 13 Review	588–89	<ul style="list-style-type: none"> Mathardy: Ch. 13 Chapter 13 Review Cumulative Review 13 	
165	Chapter 13 Test			

Chapter 14: Polynomials				
166	14.1 Types of Polynomials	590–95	<ul style="list-style-type: none"> • Prime-Generating Polynomials 	<ul style="list-style-type: none"> • the manifold works of God • Christian monotheism
167	14.2 Adding Polynomials	596–99	<ul style="list-style-type: none"> • Creation Wonders—The Senses of Smell and Taste 	<ul style="list-style-type: none"> • biblical references to the created wonders of taste and smell*
168	14.3 Subtracting Polynomials	599–602	<ul style="list-style-type: none"> • Quiz 1 (14.1–14.2) 	
169	Problem Solving—Mixed Review	603	<ul style="list-style-type: none"> • Adding and Subtracting Polynomials 	
170	14.4 Multiplying by a Monomial Math in Use—Charles Babbage	604–8	<ul style="list-style-type: none"> • Calculator Skill 14 • Problem Solving—Multiple Strategies 	<ul style="list-style-type: none"> • laboring together for Christ*
171	14.5 Multiplying Binomials	609–11	<ul style="list-style-type: none"> • Multiplying Binomials • Quiz 2 (14.3–14.4) 	
172	14.6 Dividing by a Monomial	612–15	<ul style="list-style-type: none"> • Multiplying and Dividing by Monomials 	
173	14.7 Applying Algebra	616–20	<ul style="list-style-type: none"> • Using Algebra 	
174	14.5–14.7 Review		<ul style="list-style-type: none"> • Quiz 3 (14.5–14.7) 	
175	Math & Scripture—Shipwrecked	621		<ul style="list-style-type: none"> • Infinite Truths • the just shall live by faith*
176	Chapter 14 Review	622–23	<ul style="list-style-type: none"> • Mathardy: Ch. 14 • Chapter 14 Review • Cumulative Review 14 	
177	Chapter 14 Test			
178	Review for Final Exam			
179	Review for Final Exam			
180	Final Exam (Chapters 8–14)			