

GEOMETRY STANDARD LESSON PLAN OVERVIEW

This Standard Lesson Plan allocates 90 days for each semester.

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

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

Student Activities, included on the *Teacher's Toolkit CD*

*covered in the *Teacher's Edition* or *TTK CD: Student Activities*

Day	Topic	Pages	Support Materials	Bible Integration
<i>Chapter 1: Foundations of Geometry</i>				
1	Introduction	v–1		<ul style="list-style-type: none"> • using geometry in architectural feats • building blocks for Christian living (e.g., Bible study, prayer)*
2–3	1.1 Sets	2–6	<ul style="list-style-type: none"> • Sets in Brief: Elements and Subsets • Sets in Detail: Set Operations • Math History: Georg Cantor • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • the Great Commission (Mark 16:15)* • recognizing the need to witness to the unsaved (John 4:35)*
4	1.2 Undefined Terms and Definitions	6–10	<ul style="list-style-type: none"> • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • presupposing the Bible is God's Word (2 Tim. 3:16)* • seeing the world as it is meant to be seen (Heb. 11:3)*
5	1.3 An Ideal Geometry	10–15	<ul style="list-style-type: none"> • Appendix C, The Hiroshima of Mathematics • Quiz 1 (1.1–1.2) • Geometry and Scripture: God's Consistency 	<ul style="list-style-type: none"> • describing God's wonderfully created universe adequately is impossible (Gen. 3:14–19; Job 38; Isa. 55:8–9) • believing the Bible is God's Word is a Christian cornerstone (Luke 6:47–49; 2 Tim. 3:16) • accepting Christ's work on the cross is based on God's Word (Acts 4:12; 1 Cor. 15:3–4) • recognizing the sufficiency of God (2 Cor. 12:9)*
6	Geometry in History—Not Your Usual Math Club	16–18		<ul style="list-style-type: none"> • knowing the mind of God through the revelation in the Bible (Job 38–41; Isa. 55:8–9)* • pattern recognition and human reasoning are a result of God's design (Gen. 2:19–20)*
7	1.4 Subsets of Lines and Planes	18–23	<ul style="list-style-type: none"> • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • Jesus created all things (Col. 1:16)*
8	Review 1.1–1.4		<ul style="list-style-type: none"> • Quiz 2 (1.3–1.4) • Terms and Symbols: Sections 1–4 • Practice: Sections 1–4 • Review: Sections 1–4 	

Day	Topic	Pages	Support Materials	Bible Integration
9	1.5 Segment and Angle Measure	23–29	<ul style="list-style-type: none"> • <i>TTK CD: Visuals and Resources</i> 	<ul style="list-style-type: none"> • measuring our lives by the absolute standards in God’s Word (2 Cor. 10:12–18)
10	Technology Corner— Introduction to The Geometer’s Sketchpad	30		
11–12	1.6 Two-Dimensional Figures	31–38	<ul style="list-style-type: none"> • <i>Prefixes in Detail</i> • <i>Math History: Jan Brouwer</i> • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • denying the deity of Christ and the Trinity is characteristic of many false religions*
13	1.7 Three-Dimensional Figures	39–44	<ul style="list-style-type: none"> • Appendix D, Flatland • <i>Quiz 3 (1.5–1.6)</i> • <i>TTK CD: Visuals</i> 	
14	1.8 Sketches, Drawings, and Constructions	45–49	<ul style="list-style-type: none"> • <i>Construction Skills</i> • <i>The Geometer’s Sketchpad Investigations</i> • <i>TTK CD: Resources</i> 	<ul style="list-style-type: none"> • God’s creation of an orderly universe (Gen. 8:22; Col. 1:16–17; 1 Cor. 14:40) • geometric tools mentioned in Scripture (Isa. 44:13)*
15	Chapter 1 Review	50–51	<ul style="list-style-type: none"> • <i>Quiz 4 (1.7–1.8)</i> • <i>Terms and Symbols: Sections 5–7</i> • <i>Practice: Sections 5–8</i> 	
16	<i>Activities</i> or <i>Mathardy</i>		<ul style="list-style-type: none"> • <i>Cumulative Review: Sections 1–7</i> • <i>TTK CD: Resources</i> • <i>Mathardy: Ch. 1</i> 	
17	<i>Chapter 1 Test</i>			

Chapter 2: Reasoning and Proof

18	2.1 Inductive Reasoning	52–58	<ul style="list-style-type: none"> • Appendix E, Sherlock Holmes • <i>Math History: Aristotle</i> • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • understanding and reasoning possible since God created humans as thinking beings • importance of striving for understanding (Prov. 4:7) • importance of reasoning (Isa. 1:18; 1 Pet. 3:15) • proclaiming and accepting the gospel involves reasoning (Matt. 28:19–20; Acts 24:24–25) • being wary of deceptive reasoning (1 Cor. 6:9–10; 15:33; Gal. 6:7; 2 Cor. 11:14)
19	2.2 Statements and Truth Values	60–65		<ul style="list-style-type: none"> • discerning the validity of statements through the God of truth and His Word (Eph. 5:6; Ps. 31:5; John 17:17)
20	Geometry Around Us— Designers and Patterns	59	<ul style="list-style-type: none"> • <i>Quiz 1 (2.1–2.2)</i> 	<ul style="list-style-type: none"> • God’s design in creation declares His glory (Job 37:10; 38:29; Luke 12:27; Ps. 19:1) • biomimicry • learning from God’s creation (Job 12:7–8; Prov. 6:6–8)*
21–22	2.3 Conditionals and Biconditionals	65–71	<ul style="list-style-type: none"> • <i>Practicing Truth Tables</i> • <i>Switching Circuits</i> 	

Day	Topic	Pages	Support Materials	Bible Integration
23	2.4 Deductive Reasoning	71–77	<ul style="list-style-type: none"> • Appendix F, Through the Looking Glass • Appendix G, God and Logic • <i>TTK CD: Resources</i> 	<ul style="list-style-type: none"> • sinful man must die (Rom. 3:23; 6:23; Rev. 21:8) • believing on Jesus brings salvation (Rom. 10:9–13) • the importance of logic from a Christian perspective* • Christ’s resurrection guarantees ours (1 Cor. 15:13–20) • encouraging sound doctrine (2 Tim. 4:1–5; Titus 1:9–11)
24	Review 2.1–2.4		<ul style="list-style-type: none"> • Quiz 2 (2.3–2.4) • Geometry and Scripture: Statements • Fallacies in Advertising 	<ul style="list-style-type: none"> • understanding logic statements to discern truth and to avoid deception*
25	2.5 Algebraic Reasoning	78–83	<ul style="list-style-type: none"> • Sports Teams as an Equivalence Relation • Truth Tables in Detail • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • our labor in the work of the Lord is not in vain (1 Cor. 15:58) • God’s Word guides us (Prov. 6:23; Ps. 119:105)*
26	2.6 Proofs Using Segments	83–87	<ul style="list-style-type: none"> • Pasch’s Postulate • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • working diligently at tasks set before us (Gen. 2:15; Eph. 4:28; Col. 3:23; 2 Thess. 3:10–13)
27	Technology Corner— Angle Conjectures	88	<ul style="list-style-type: none"> • Quiz 3 (2.5–2.6) 	
28–29	2.7 Proofs Using Angles	89–96	<ul style="list-style-type: none"> • <i>TTK CD: Visuals</i> 	
30	2.8 Bisectors	97–102	<ul style="list-style-type: none"> • The Geometer’s Sketchpad Investigations • Construction Skills • <i>TTK CD: Visuals and Resources</i> 	
31	Chapter 2 Review	103–5	<ul style="list-style-type: none"> • Quiz 4 (2.7–2.8) 	
32	<i>Activities</i> or <i>Mathardy</i>		<ul style="list-style-type: none"> • Terms, Symbols, and Proofs • Cumulative Review • <i>Mathardy: Ch. 2</i> 	
33	Chapter 2 Test			

<i>Chapter 3: Parallel and Perpendicular Lines</i>				
34	3.1 Parallel Lines and Transversals	106–13	<ul style="list-style-type: none"> • Parallel Lines • <i>TTK CD: Visuals and Resources</i> 	<ul style="list-style-type: none"> • designing unique buildings geometrically
35	3.2 Proving Lines Parallel	114–19	<ul style="list-style-type: none"> • Practicing with Transversals • <i>TTK CD: Visuals</i> 	
36	3.3 Constructing Parallel and Perpendicular Lines	120–25	<ul style="list-style-type: none"> • Appendix H, Learning Math and Learning Truth: Back to Jerusalem and Athens • Quiz 1 (3.1–3.2) • Construction Skills • Architecture in Brief • <i>TTK CD: Resources</i> 	<ul style="list-style-type: none"> • viewing mathematics and truth from a biblical perspective*
37	Geometry in History—A Revolutionary Museum	126–28	<ul style="list-style-type: none"> • Quiz 2 (3.3) 	<ul style="list-style-type: none"> • God’s Word reveals erroneous thinking (Gal. 1:8)* • recognizing the true source of knowledge (Prov. 1:7; John 17:17) • affirming the existence of God (Rom. 1:20; 1 Cor. 8:6; Col. 2:3; Rev. 4:11)*

Day	Topic	Pages	Support Materials	Bible Integration
38	3.4 Distances, Midpoints, and Slopes	129–35	<ul style="list-style-type: none"> • Geometry and Scripture: Distance • TTK CD: Visuals 	<ul style="list-style-type: none"> • ensuring safety (Deut. 22:8)* • understanding measurements in Scripture*
39	Technology Corner—Midpoints and Slopes	136		
40–41	3.5 Equations of Lines	137–42	<ul style="list-style-type: none"> • The Geometer's Sketchpad Investigations • Math History: Johann Heinrich Lambert 	
42	Chapter 3 Review	143–45	• Quiz 3 (3.4–3.5)	
43	Activities or Mathardy		<ul style="list-style-type: none"> • Cumulative Review • Mathardy: Ch. 3 	
44	Chapter 3 Test			
45	Review Chapters 1–3			
46	First Quarter Exam (Chapters 1–3)			

Chapter 4: Congruent Triangles

47	4.1 Angles in Triangles	146–55	<ul style="list-style-type: none"> • The Geometer's Sketchpad Investigations • TTK CD: Visuals and Resources 	<ul style="list-style-type: none"> • avoiding deception by relying on the Bible (Gal. 1:8–9; 1 John 4:1; Acts 17:11) • loving God leads to loving others (Luke 10:27)* • setting our affections on things above (Col. 3:2; Matt. 6:33)*
48	4.2 Congruent Figures	156–62	<ul style="list-style-type: none"> • Design in Detail • TTK CD: Visuals 	
49	4.3 Congruence Postulates	163–68	<ul style="list-style-type: none"> • Quiz 1 (4.1–4.2) • TTK CD: Visuals 	
50	4.4 Applying Congruence Postulates	169–75	• TTK CD: Visuals	<ul style="list-style-type: none"> • striving to achieve (Phil. 3:13–17) • serving God enthusiastically brings His reward (Col. 3:23–24)
51	Review 4.1–4.4			
52	Technology Corner—Exploring AAA and SSA	176	• Quiz 2 (4.3–4.4)	
53	4.5 Conditions for Congruent Triangles	177–85	<ul style="list-style-type: none"> • Math History: Euclid • TTK CD: Visuals 	
54	4.6 Right Triangle Congruence	185–91	<ul style="list-style-type: none"> • Construction Skills • Terms and Symbols • TTK CD: Visuals 	
55	Review 4.5–4.6			
56	Geometry Around Us—Architects and Buildings	192	<ul style="list-style-type: none"> • Quiz 3 (4.5–4.6) • Geometry and Scripture: Architecture 	<ul style="list-style-type: none"> • following plans in construction (1 Chron. 28:11–12; 1 Kings 6) • recognizing God's involvement in the architecture of the ark, the tabernacle, and the New Jerusalem*
57	4.7 Coordinate Geometry of Triangles	193–200	• TTK CD: Visuals	
58	Chapter 4 Review	201–3	• Quiz 4 (4.7)	
59	Activities or Mathardy		<ul style="list-style-type: none"> • Cumulative Review • Mathardy: Ch. 4 	
60	Chapter 4 Test			

Day	Topic	Pages	Support Materials	Bible Integration
<i>Chapter 5: Relationships in Triangles</i>				
61–62	5.1 Circumcenter and Orthocenter	204–13	<ul style="list-style-type: none"> • Appendix I, Concurrency Proofs • Conjectures • TTK CD: Visuals 	<ul style="list-style-type: none"> • providing geometric beauty in design with triangles • symbolizing the Trinity with an equilateral triangle (Matt. 28:19; John 10:30) • Christians encouraged to be like-minded (Phil. 2:2)*
63	5.2 Incenter and Centroid	214–20	<ul style="list-style-type: none"> • Appendix I, Concurrency Proofs • The Geometer's Sketchpad Investigations • TTK CD: Visuals and Resources 	
64	Technology Corner—Triangle Relationships	221	<ul style="list-style-type: none"> • Quiz 1 (5.1–5.2) 	
65	5.3 Inequalities	221–27	<ul style="list-style-type: none"> • Math History: Jean-Victor Poncelet • TTK CD: Visuals 	<ul style="list-style-type: none"> • illustrating inequality properties (Gen. 5; 41; Exod. 30; Matt. 25:14–30)
66–67	5.4 Indirect Proofs	227–32	<ul style="list-style-type: none"> • Indirect Proofs in Detail • Detectives 	<ul style="list-style-type: none"> • illustrating indirect reasoning (2 Kings 7:3–5; 1 Cor. 15:12–20; Matt. 7:24–27)
68	Geometry Around Us—Carpentry	233	<ul style="list-style-type: none"> • Quiz 2 (5.3–5.4) 	<ul style="list-style-type: none"> • identifying opportunities for good works (James 2:14–16; Matt. 5:16; 2 Tim. 3:17)* • fulfilling the Great Commission (Matt. 28:19–20)*
69	5.5 More Inequalities	234–42	<ul style="list-style-type: none"> • TTK CD: Visuals and Resources 	
70	Chapter 5 Review	243–45	<ul style="list-style-type: none"> • Quiz 3 (5.4–5.5) 	
71	Activities or Mathardy		<ul style="list-style-type: none"> • Terms and Proofs • Cumulative Review • Mathardy: Ch. 5 	
72	Chapter 5 Test			

Day	Topic	Pages	Support Materials	Bible Integration
<i>Chapter 6: Quadrilaterals</i>				
73	6.1 Classifying Quadrilaterals	246–54	• <i>TTK CD: Visuals and Resources</i>	• using geometric relationships in helping others
74	Technology Corner—Exploring Quadrilaterals	255		
75	6.2 Characteristics of Parallelograms	256–63	• <i>Math History: Quadrilaterals</i> • <i>Geometry and Scripture: Dimensions</i> • <i>TTK CD: Visuals</i>	• exploring the dimensions of our universe and understanding that God is not limited by scientific laws*
76–77	6.3 Proofs of Parallelograms	263–69	• <i>Quiz 1 (6.1–6.2)</i> • <i>TTK CD: Visuals and Resources</i>	
78	6.4 Rectangles, Rhombi, and Squares	270–76	• <i>Construction Skills</i> • <i>TTK CD: Visuals</i>	
79	Review 6.1–6.4		• <i>Quiz 2 (6.3–6.4)</i>	
80	6.5 Trapezoids and Kites	277–85	• <i>Parallelogram Proofs</i> • <i>Cyclic Quadrilaterals</i> • <i>The Geometer's Sketchpad Investigations</i> • <i>TTK CD: Visuals and Resources</i>	
81	Geometry Around Us—Sports	286		• presenting our bodies prepared for every good work (1 Cor. 6:19–20; Rom. 12:1; 2 Tim. 2:21) • competing correctly with grace (2 Tim. 2:5; Matt. 7:12; Phil. 2:3–4) • learning self-discipline (Eccles. 7:9; Titus 2:12) • bringing honor to Christ instead of self (Matt. 20:25–28; Prov. 25:27; 1 Cor. 10:31; 2 Cor. 10:17; Jer. 9:23–24)
82–83	6.6 Coordinate Geometry of Quadrilaterals	287–92	• <i>Terms and Proofs</i>	
84	Chapter 6 Review	293–95	• <i>Quiz 3 (6.5–6.6)</i>	
85	<i>Activities</i> or <i>Mathardy</i>		• <i>Cumulative Review</i> • <i>Mathardy: Ch. 6</i>	
86	<i>Chapter 6 Test</i>			
87–89	Review for Second Quarter Exam (Chapters 4–6) or First Semester Exam (Chapters 1–6)			
90	<i>Second Quarter Exam or First Semester Exam</i>			

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<i>Chapter 7: Area</i>				
91	7.1 Areas of Rectangles, Parallelograms, and Triangles	296–304	<ul style="list-style-type: none"> • Geometry and Scripture: Area • Perimeter and Area • The Geometer's Sketchpad Investigations • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • God formed the earth for man to have dominion (Isa. 45:18; Gen. 1:28)* • considering the needs of others as farmers improve agricultural techniques (Lev. 19:9–10; Deut. 24:19–22; Ruth 2:2–3; Matt. 12:1) • preaching the gospel to all lands (Rom. 15:20–24) • realizing the importance of evangelism (1 Cor. 9:16)* • understanding area in Scripture*
92	Technology Corner—Center of Gravity	305		
93	7.2 Areas of Other Quadrilaterals	306–11	<ul style="list-style-type: none"> • <i>TTK CD: Visuals</i> 	
94	7.3 The Pythagorean Theorem	312–17	<ul style="list-style-type: none"> • Quiz 1 (7.1–7.2) • Math History: Heron of Alexandria • <i>TTK CD: Visuals</i> 	<ul style="list-style-type: none"> • God's creation of man's intellectual ability versus the evolutionary view of the undeveloped intelligence of the caveman*
95–96	7.4 Special Right Triangles	318–24	<ul style="list-style-type: none"> • Skills Review: Sections 1–4 • <i>TTK CD: Visuals</i> 	
97	Geometry in History—Another Purpose	325–26	<ul style="list-style-type: none"> • Quiz 2 (7.3–7.4) 	<ul style="list-style-type: none"> • impact of worldview on vocations (Deut. 18:10–14)* • consulting worldly wisdom is fruitless (Dan. 4:6–7)*
98	7.5 Areas of Regular Polygons	327–32	<ul style="list-style-type: none"> • Drawing Octagons • <i>TTK CD: Visuals</i> 	
99–100	7.6 Circles, Sectors, and Segments	333–38	<ul style="list-style-type: none"> • Skills Review: Sections 5–6 • Geometric Probability • Terms, Symbols, and Proofs • <i>TTK CD: Visuals</i> 	
101	Chapter 7 Review	339–41	<ul style="list-style-type: none"> • Quiz 3 (7.5–7.6) 	
102	Activities or Mathardy		<ul style="list-style-type: none"> • Cumulative Review • Mathardy: Ch. 7 	
103	Chapter 7 Test			

Day	Topic	Pages	Support Materials	Bible Integration
<i>Chapter 8: Circles</i>				
104	8.1 Circles and Chords	342–50	<ul style="list-style-type: none"> • The Geometer's Sketchpad Investigations • TTK CD: Visuals 	<ul style="list-style-type: none"> • ability to communicate brings responsibility to edify others (James 3:1–12) • unity of the Trinity (Matt. 28:19; 1 Tim. 2:5)
105–6	8.2 Tangents	351–58	<ul style="list-style-type: none"> • The Geometer's Sketchpad Investigations • Locus Problem Principles • TTK CD: Visuals 	
107	Technology Corner—Constructing Common Tangents	359		
108–9	8.3 Arc Measure and Length	360–68	<ul style="list-style-type: none"> • Quiz 1 (8.1–8.2) • Math History: Archimedes • TTK CD: Visuals 	
110	Geometry Around Us—Transportation	369		<ul style="list-style-type: none"> • fearing and believing the Lord (Exod. 14:25–31) • preparing to do God's will (Eph. 5:17) • using geometry to exercise dominion over the earth and meet people's needs (Gen. 1:28; Gal. 6:2)* • biomimicry (Col. 1:16)*
111	8.4 Inscribed Angles	370–75	<ul style="list-style-type: none"> • Geometry and Scripture: Pi • TTK CD: Visuals 	<ul style="list-style-type: none"> • exploring the value of pi as described in 1 Kings 7:23–26*
112	Review 8.1–8.4		<ul style="list-style-type: none"> • Quiz 2 (8.3–8.4) 	
113	8.5 Angles and Circles	376–81	<ul style="list-style-type: none"> • TTK CD: Visuals 	
114–15	8.6 Circular Constructions	382–86	<ul style="list-style-type: none"> • Quiz 3 (8.5) • Construction Skills • Cyclic Quadrilaterals Revisited • TTK CD: Visuals and Resources 	
116	8.7 Coordinate Geometry of Circles	387–92	<ul style="list-style-type: none"> • Skills Review 	
117	Chapter 8 Review	393–95	<ul style="list-style-type: none"> • Quiz 4 (8.6–8.7) • Terms and Symbols 	
118	Activities or Mathardy		<ul style="list-style-type: none"> • Cumulative Review • Mathardy: Ch. 8 	
119	Chapter 8 Test			

<i>Chapter 9: Surface Area and Volume</i>				
120	9.1 Analyzing Three-Dimensional Figures	396–404	<ul style="list-style-type: none"> • TTK CD: Visuals and Resources 	<ul style="list-style-type: none"> • applying scripturally derived principles to mathematical methods (2 Tim. 3:16–17)* • true wisdom begins with the fear of the Lord (Prov. 9:10)
121	Technology Corner—Platonic Solids	405	<ul style="list-style-type: none"> • Math History: Plato • Platonic Solids 	
122	9.2 Surface Areas of Prisms and Cylinders	406–12	<ul style="list-style-type: none"> • TTK CD: Visuals 	

Day	Topic	Pages	Support Materials	Bible Integration
123	9.3 Surface Areas of Pyramids and Cones	412–21	<ul style="list-style-type: none"> • Quiz 1 (9.1–9.2) • TTK CD: Visuals 	
124	9.4 Volumes of Prisms and Cylinders	421–28	<ul style="list-style-type: none"> • Geometry and Scripture: Volume • TTK CD: Visuals 	<ul style="list-style-type: none"> • using just balances and measures (Ezek. 45:10)* • understanding units of volume in Scripture*
125	Review 9.1–9.4 Geometry Around Us— Engineering	435		<ul style="list-style-type: none"> • developing a solid biblical worldview as a means to making wise choices and honoring God in all we do
126	9.5 Volumes of Pyramids and Cones	428–34	<ul style="list-style-type: none"> • Quiz 2 (9.3–9.4) • TTK CD: Visuals and Resources 	
127	9.6 Surface Areas and Volumes of Spheres	436–41	<ul style="list-style-type: none"> • Skills Review: Surface Area and Volume 	
128	Review 9.5–9.6		<ul style="list-style-type: none"> • Quiz 3 (9.5–9.6) 	
129	9.7 Geometry of Spheres	441–46	<ul style="list-style-type: none"> • Appendix M, Implications and Insights • Math History: Georg Friedrich Bernhard Riemann • Hyperbolic Geometry • TTK CD: Visuals • Any world atlas or globe 	<ul style="list-style-type: none"> • faith is not in the wisdom of men (1 Cor. 2:5) • God's infallible Word provides a sure foundation (2 Tim. 3:16)
130	9.8 Drawing Three-Dimensional Figures	446–52	<ul style="list-style-type: none"> • Math History: Gaspard Monge • The Geometer's Sketchpad Investigations • TTK CD: Visuals and Resources 	
131	Chapter 9 Review	453–55	<ul style="list-style-type: none"> • Quiz 4 (9.7–9.8) • Terms and Practice 	
132	Activities or Mathardy		<ul style="list-style-type: none"> • Cumulative Review • Mathardy: Ch. 9 	
133	Chapter 9 Test			
134	Review Chapters 7–9			
135	Third Quarter Exam (Chapters 7–9)			

Chapter 10: Transformations and Symmetry

136	10.1 Reflections	456–65	<ul style="list-style-type: none"> • Transformations in Brief • The Geometer's Sketchpad Investigations • TTK CD: Visuals and Resources 	<ul style="list-style-type: none"> • the earth and its living creatures testify that God created it all (Job 12:7–10) • biomimicry
137	10.2 Translations	465–72	<ul style="list-style-type: none"> • Geometry and Scripture: Transformations • TTK CD: Visuals and Resources 	<ul style="list-style-type: none"> • exploring translations found in Scripture*
138–39	10.3 Rotations	473–80	<ul style="list-style-type: none"> • Quiz 1 (10.1–10.2) • TTK CD: Visuals and Resources 	
140	10.4 Isometries	481–88	<ul style="list-style-type: none"> • Rigid Motion and Isometries • TTK CD: Visuals and Resources 	
141	Review 10.3–10.4		<ul style="list-style-type: none"> • Quiz 2 (10.3–10.4) 	

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142	Geometry in History— Computer Graphics	489–91	• The Geometer's Sketchpad Investigations	<ul style="list-style-type: none"> analyzing and responding to an expressed worldview the universe was created and is sustained by God (Gen. 1:1–2; Jer. 32:17; Rom. 11:36; Col. 1:16–17; Job 33:4; 1 Cor. 8:6)*
143	10.5 Symmetry	492–98	• TTK CD: Visuals	<ul style="list-style-type: none"> praising God for His wonderful works of creation (Ps. 139:14) humans without excuse before God (Rom. 1:20)
144	10.6 Dilations	498–504	<ul style="list-style-type: none"> Math History: Felix Klein Möbius Strip and Klein Bottle Topological Transformations TTK CD: Visuals and Resources 	
145	Review 10.5–10.6		• Quiz 3 (10.5–10.6)	
146	10.7 Tessellations	505–9	• TTK CD: Visuals and Resources	
147	Technology Corner— Drawing Tessellations	510		
148	Chapter 10 Review	511–15	<ul style="list-style-type: none"> Quiz 4 (10.7) Terms, Symbols, and Practice TTK CD: Resources 	<ul style="list-style-type: none"> worldview analysis essay exercise
149	Activities or Mathardy		<ul style="list-style-type: none"> Cumulative Review Mathardy: Ch. 10 	
150	Chapter 10 Test			

<i>Chapter 11: Similarity</i>				
151	11.1 Similar Figures	516–24	<ul style="list-style-type: none"> Math History: David Hilbert TTK CD: Visuals 	<ul style="list-style-type: none"> praising God for His wonderful works of creation (Ps. 139:14) discussion of the scale model of Jerusalem*
152	11.2 Proving Similar Triangles	524–32	<ul style="list-style-type: none"> Appendix N, Postulate Summary The Geometer's Sketchpad Investigations TTK CD: Visuals and Resources 	
153	11.3 Similarity Within Right Triangles	532–38	<ul style="list-style-type: none"> Quiz 1 (11.1–11.2) The Geometer's Sketchpad Investigations TTK CD: Visuals and Resources 	
154	Technology Corner— Investigating Parallel Partitions	539		
155	11.4 Proportional Partitions	540–48	• TTK CD: Visuals	
156	Review 11.1–11.4		• Quiz 2 (11.3–11.4)	
157	11.5 Lengths, Areas, and Volumes of Similar Figures	549–54	<ul style="list-style-type: none"> The Geometer's Sketchpad Investigations TTK CD: Visuals and Resources 	
158	11.6 Circles and Proportions	555–62	• TTK CD: Visuals and Resources	

Day	Topic	Pages	Support Materials	Bible Integration
159	Geometry Around Us—Art	563	<ul style="list-style-type: none"> • Appendix O, Leonardo da Vinci • Quiz 3 (11.5–11.6) • Geometry and Scripture: Images 	<ul style="list-style-type: none"> • recognizing proportions in creation • using artistic talents in ministry • understanding God’s view of artistic images* • understanding that we are created in God’s image*
160	11.7 The Golden Ratio	564–70	<ul style="list-style-type: none"> • Appendix P, Spirals • The Geometer’s Sketchpad Investigations • TTK CD: Visuals 	<ul style="list-style-type: none"> • communicating accurately and honestly so personal testimony and integrity are not harmed (2 Cor. 8:21)* • intriguing examples of golden spirals in nature from a biblical worldview*
161	Chapter 11 Review	571–73	<ul style="list-style-type: none"> • Quiz 4 (11.7) • Skills Review 	<ul style="list-style-type: none"> • preparing to serve God wherever He may lead*
162	Activities or Mathardy		<ul style="list-style-type: none"> • Cumulative Review • Mathardy: Ch. 11 	
163	Chapter 11 Test			

Chapter 12: Trigonometry

164	12.1 Trigonometric Ratios	574–81	<ul style="list-style-type: none"> • Math History: The Development of Trigonometry • The Geometer’s Sketchpad Investigations • TTK CD: Visuals and Resources 	<ul style="list-style-type: none"> • using geometry in surveying, space exploration, navigation, and engineering to provide for needs of life on earth (Deut. 19:14; 27:17)
165	12.2 Solving Right Triangles	582–88	<ul style="list-style-type: none"> • TTK CD: Visuals and Resources 	
166	Geometry Around Us—Space Exploration	589	<ul style="list-style-type: none"> • Quiz 1 (12.1–12.2) 	<ul style="list-style-type: none"> • discussion and worldview analysis relating to quotes from astronauts
167	12.3 Area	590–95	<ul style="list-style-type: none"> • Skills Review: Sections 1–3 • TTK CD: Visuals 	
168	12.4 Vectors	596–601	<ul style="list-style-type: none"> • TTK CD: Visuals 	
169	Review 12.3–12.4		<ul style="list-style-type: none"> • Quiz 2 (12.3–12.4) 	
170	Technology Corner—Discovering Trigonometric Identities	602		
171	12.5 Trigonometric Identities	603–7	<ul style="list-style-type: none"> • Golden Rectangle: Proof Construction 	<ul style="list-style-type: none"> • Jesus is one with God (John 5:18; 10:30)*
172	12.6 Law of Cosines and Law of Sines	608–13	<ul style="list-style-type: none"> • Skills Review: Section 6 • TTK CD: Visuals 	<ul style="list-style-type: none"> • using trigonometry to better fulfill the Creation Mandate (Gen. 1:28)*
173	Review 12.5–12.6		<ul style="list-style-type: none"> • Quiz 3 (12.5–12.6) • Terms and Practice 	
174	Chapter 12 Review	614–16	<ul style="list-style-type: none"> • Cumulative Review 	
175	Activities or Mathardy		<ul style="list-style-type: none"> • Mathardy: Ch. 12 	
176	Chapter 12 Test			
177–79	Review for Fourth Quarter Exam (Chapters 10–12) or Second Semester Exam (Chapters 7–12)			
180	Fourth Quarter Exam or Second Semester Exam			