Algebra 2, 3rd ed.

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 |
| **Chapter 1: Basic Algebra** | | | | |
| 1 | Introduction | vi–1 | Appendix D, Dominion Modeling  Bible Integration: What Is the Dominion Mandate? | Biblical Worldview Connection; predicting disease to help relieve human suffering  providing for the needs of others  managing creation\* |
| 2 | 1.1 Real Numbers | 2–6 | TTK CD: Visuals | successful living by depending on the foundation of Christ  God’s creation and man created in His image\*  understanding and declaring God’s wondrous works\* |
| 3 | 1.2 Real Number Operations | 7–11 | Quiz 1 (1.1) |  |
| 4 | 1.3 Simplifying Algebraic Expressions  Algebra Around the World—Ancient Numeration | 12–17 | Graphing Calculator: Evaluating Expressions | the Lord blessed Daniel and his friends as they purposed to put Him first  God multiplies blessings as Christians develop godly character\* |
| 5 | 1.4 Solving Equations | 18–22 | Quiz 2 (1.2–1.3) | making growth a daily goal in one’s Christian walk |
| 6 | 1.5 Applying Equations | 23–29 |  | applying godly wisdom to solve the problems of life  problem-solving ways of a godly person\* |
| 7 |
| 8 | 1.6 Solving Inequalities | 29–33 | Appendix F, Study Skills (Before Class)  Quiz 3 (1.4–1.5) | using God-given abilities to glorify Him |
| 9 | 1.7 Compound Inequalities | 34–38 | Math History: Richard Dedekind  TTK CD: Visuals |  |
| 10 | 1.8 Absolute Value Equations | 38–43 | Quiz 4 (1.6–1.7)  Graphing Calculator: Absolute Value—Numbers and Equations |  |
| 11 | Programming Project  Technology Corner | 43–44 |  |  |
| 12 | 1.9 Absolute Value Inequalities | 45–49 | Practice with Linear Equations and Inequalities  Enrichment: Graphs of Absolute Value Inequalities |  |
| 13 | Dominion Modeling | 50 | Quiz 5 (1.8–1.9) | God’s command to have dominion over the earth\* |
| 14 | Chapter 1 Review  College Entrance Test Preparation | 51–53 | Mathardy: Ch. 1 |  |
| 15 | Chapter 1 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 2: Linear Relations** | | | | |
| 16 | 2.1 Relations and Functions  Math in History—Hypatia | 54–62 | Bible Integration: Bible, Math, and Logic  TTK CD: Visuals | Biblical Worldview Connection; using mathematics to help meet human needs and manage natural resources  diligently pursuing God-given gifts\*  the use of logic by Christ and Paul\* |
| 17 | 2.2 Graphs of Linear Equations | 63–68 | Quiz 1 (2.1)  Graphing Calculator: Graphing Linear Functions from Equations  TTK CD: Visuals | speaking truth\*  abstaining from deceiving others\* |
| 18 | 2.3 Writing Linear Equations | 69–74 | Appendix G, Excerpts from Bible Numerics  Practice: Linear Functions  Bible Integration: Reflecting on Allis’s Paper “Excerpts from *Bible Numerics*”  TTK CD: Visuals and Resources | diligent planning |
| 19 |
| 20 | 2.4 Modeling Linear Data  Technology Corner | 74–81 | Appendix E, Linear Regression on the TI-841  Quiz 2 (2.2–2.3)  Graphing Calculator: Linear Regressions  TTK CD: Resources | the world’s hatred for Christ\*  the broad way to destruction\*  God’s command and help for evangelism\* |
| 21 |
| 22 | 2.5 Special Functions | 82–87 | TTK CD: Resources | wise men lay up knowledge |
| 23 | 2.6 Graphing Inequalities | 88–92 | Appendix F, Study Skills (During Class)  Quiz 3 (2.4–2.5) |  |
| 24 | 2.7 Distances and Midpoints | 92–97 | TTK CD: Visuals and Resources | spiritual battle\* |
| 25 | Dominion Modeling | 98–99 | Quiz 4 (2.6–2.7)  TTK CD: Resources | considering biblical history in viewing Earth’s climate  valuing efforts to model Earth’s climate |
| 26 | Chapter 2 Review  College Entrance Test Preparation | 100–103 | Mathardy: Ch. 2 |  |
| 27 | Chapter 2 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 3: Solving Systems** | | | | |
| 28 | 3.1 Solving Systems Graphically  Technology Corner | 104–12 | Appendix H, Modern Mathematics in a Christian College  Appendix I, Reflections of God in the Structure of the Physical Universe  Bible Integration: Reflecting on Zwier’s Paper  Enrichment: A “Proof” That 1 = 0 | Biblical Worldview Connection; assisting others and not benefiting from their misfortunes  constructing a correct worldview with God’s Word\*  the ungodly pervert God’s truth\* |
| 29 | 3.2 Solving Systems Algebraically | 112–17 | Practice with Systems of Equations  TTK CD: Visuals |  |
| 30 |
| 31 | 3.3 Solving Problems with Systems | 117–22 | Quiz 1 (3.1–3.2) | Scripture guides our hearts to godly thinking and reasoning |
| 32 | Algebra Around the World—Greek Math  3.4 Graphing Systems of Inequalities | 123–27 |  |  |
| 33 | 3.5 Linear Programming | 128–33 | Quiz 2 (3.3–3.4)  Bible Integration: Bible, Math, and Business  TTK CD: Visuals | using business profits to benefit employees, customers, and others  laboring for the Lord\*  God’s commands about work\*  Abraham’s business example\* |
| 34 | 3.6 Linear Systems in Three Variables | 134–39 |  |  |
| 35 | Dominion Modeling | 140 | Quiz 3 (3.5–3.6) | seeking wise counsel  being patient  not withholding good from them to whom it is due |
| 36 | Chapter 3 Review  College Entrance Test Preparation | 141–43 | Mathardy: Ch. 3 |  |
| 37 | Chapter 3 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 4: Matrices** | | | | |
| 38 | 4.1 Organizing Data with Matrices | 144–50 | Bible Integration: Bible, Math, and Grammar  TTK CD: Visuals | Biblical Worldview Connection; communicating truth because our God is a God of truth  rejoicing in the truth\*  grammar aids in understanding\* |
| 39 | Math in History—Johannes Kepler  4.2 Elementary Matrix Operations | 150–56 | Graphing Calculator: Matrix Addition and Subtraction | God and His power clearly revealed by creation\* |
| 40 | 4.3 Multiplying Matrices | 156–61 | Quiz 1 (4.1–4.2)  Practice: Matrix Products  TTK CD: Visuals and Resources |  |
| 41 | 4.4 Determinants and Cramer’s Rule | 162–67 | Graphing Calculator: Evaluating the Determinant of a Matrix  Graphing Calculator: Solving Systems of Equations by Cramer’s Rule |  |
| 42 | 4.3–4.4 review |  | Quiz 2 (4.3–4.4) |  |
| 43 | 4.5 Inverse Matrices and Solving Systems  Technology Corner | 168–73 | Graphing Calculator: Inverse of a Matrix  TTK CD: Visuals |  |
| 44 | 4.6 Matrices and Transformations | 173–79 |  |  |
| 45 | Dominion Modeling | 180–81 | Quiz 3 (4.5–4.6) | communicating honestly |
| 46 | Chapter 4 Review  College Entrance Test Preparation | 182–85 | Mathardy: Ch. 4 |  |
| 47 | Chapter 4 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 5: Quadratic Equations** | | | | |
| 48 | 5.1 Multiplying Polynomials | 186–92 | Bible Integration: Bible, Math, and Science | Biblical Worldview Connection; exhibiting Christlike concern for others by modeling motion for people’s protection  God’s wisdom and power\*  the misuse of science\* |
| 49 | 5.2 Factoring Quadratic Polynomials | 192–96 | Practice: Factoring |  |
| 50 | 5.3 Solving by Factoring | 197–200 | Math History: Niels Abel | Adam’s dominion responsibility  praising God for how we are made\* |
| 51 | 5.1–5.3 review |  | Quiz 1 (5.1–5.3) |  |
| 52 | 5.4 Solving by Taking Roots | 201–5 |  | safety in the Lord\* |
| 53 | 5.5 Complex Numbers | 205–9 | Practice: Complex Numbers | communicating truth |
| 54 | 5.4–5.5 review |  | Quiz 2 (5.4–5.5) |  |
| 55 | 5.6 Solving by Completing the Square | 209–13 |  | effort and labor that are not in vain\* |
| 56 | 5.7 The Quadratic Formula | 213–17 | Graphing Calculator: Solving Quadratic Equations Graphically | being honest before God and man\*  walking worthy of the Lord\* |
| 57 | 5.6–5.7 review |  | Quiz 3 (5.6–5.7) |  |
| 58 | 5.8 Solutions to Quadratic Equations  Technology Corner | 217–22 | Appendix J, Complex Numbers: The Story of  Practice: Quadratic Equations | discerning between right and wrong  salvation only through Christ\* |
| 59 | 5.9 Solving Quadratic Inequalities | 223–28 | Practice: Quadratic Inequalities |  |
| 60 | Algebra Around the World—Arabic Math  Dominion Modeling | 229–30 | Quiz 4 (5.8–5.9)  TTK CD: Resources | submitting to authorities who are ordained by God to promote good and to punish evildoers |
| 61 | Chapter 5 Review  College Entrance Test Preparation | 231–33 | Mathardy: Ch. 5 |  |
| 62 | Chapter 5 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 6: Polynomial Functions** | | | | |
| 63 | 6.1 Quadratic Functions | 234–40 | Math History: Jean d’Alembert  Graphing Calculator: Families of Quadratic Functions | Biblical Worldview Connection: predicting population growth as a means to carry out God’s commands  the Fall’s effect on God’s creation\*  God sustains us and meets our needs\*  seeking righteousness\* |
| 64 | 6.2 Quadratic Functions: f(x) 5 a(x 2 h)2 1 k | 241–46 | Appendix F, Study Skills (Practice Time)  Graphing Calculator: Locating the Vertex of a Parabola—Maximum or Minimum |  |
| 65 | 6.3 Zeros and Inequalities | 247–51 | Quiz 1 (6.1–6.2)  Practice with Quadratic Functions  Practice with Systems of Inequalities |  |
| 66 | 6.4 Modeling with Quadratic Functions | 251–58 | Enrichment: Graphing Parabolas in Complex Space  TTK CD: Resources | applying math and technology when possible to use God-provided resources efficiently  God supplies all our needs\* |
| 67 | Technology Corner  6.3–6.4 Review | 255 | Quiz 2 (6.3–6.4) |  |
| 68 | 6.5 Dividing Polynomials | 258–62 |  |  |
| 69 | 6.6 Factoring Polynomials | 262–66 | Graphing Calculator: Finding Zeros of Polynomial Functions |  |
| 70 | 6.5–6.6 review |  | Quiz 3 (6.5–6.6) |  |
| 71 | 6.7 Polynomial Equations  Math in History—François Viète | 266–71 | Enrichment: Modeling Functions | being diligent and persevering\* |
| 72 | 6.8 Graphing Polynomial Functions | 272–79 | Practice with Polynomial Functions and Inequalities  TTK CD: Resources |  |
| 73 | Dominion Modeling | 280–81 | Quiz 4 (6.7–6.8) | demonstrating compassion to those in need  our dominion responsibilities and God’s provisional promises\* |
| 74 | Chapter 6 Review  College Entrance Test Preparation | 282–85 | Mathardy: Ch. 6 |  |
| 75 | Chapter 6 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 7: Radicals and Exponents** | | | | |
| 76 | 7.1 Simplifying Radicals  Technology Corner | 286–92, 309 | Bible Integration: Bible, Math, and History | Biblical Worldview Connection; recognizing God’s goodness through modeling pendulum motion  making knowledge easy through understanding\*  historical examples for our admonition\*  God precedes everything\* |
| 77 | 7.2 Rational Exponents | 292–96 | Remediation: The Marvel of Compound Interest |  |
| 78 | 7.3 Sums and Differences | 296–300 | Appendix F, Study Skills (Test Preparation)  Quiz 1 (7.1–7.2) |  |
| 79 | 7.4 Products | 300–303 |  |  |
| 80 | Algebra Around the World—Italian Math  7.5 Quotients | 304–8 | Quiz 2 (7.3–7.4)  Practice with Radical and Exponential Expressions |  |
| 81 | 7.6 Radical and Exponential Equations | 309–14 | Math History: William Rowan Hamilton | studying the Bible to prevent swaying from God’s truth\* |
| 82 | 7.5–7.6 review |  | Quiz 3 (7.5–7.6) |  |
| 83 | 7.7 More Radical Equations | 314–18 | Practice with Radical and Exponential Equations |  |
| 84 | 7.8 Radical Functions | 318–23 |  | using radicals and exponents in modeling God’s creation |
| 85 | Dominion Modeling | 324–25 | Quiz 4 (7.7–7.8)  TTK CD: Resources | God created the earth for our use and enjoyment  God establishes His faithfulness in the heavens  the evidence of creation condemns those who reject the Creator\* |
| 86 | Chapter 7 Review  College Entrance Test Preparation | 326–28 | Mathardy: Ch. 7 |  |
| 87 | Chapter 7 Test | | | |
| 88 | Review for Final Exam | | | |
| 89 | Review for Final Exam | | | |
| 90 | Final Exam (Chapters 1–7) | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 8: Exponential and Logarithmic Functions** | | | | |
| 91 | 8.1 Function Operations | 330–37 | Bible Integration: Bible, Math, and Literature  TTK CD: Visuals | Biblical Worldview Connection; modeling sound to help protect the hearing of business employees  receiving the Word eagerly and studying it daily\*  separation from unbelievers and their gods\* |
| 92 | 8.2 Inverse Relations and Functions | 338–42 | Math History: Gerolamo Cardano |  |
| 93 | Technology Corner | 343 | Quiz 1 (8.1–8.2) |  |
| 94 | 8.3 Exponential Functions | 344–48 | Practice with Linear and Special Relations |  |
| 95 | 8.4 Using Exponential Functions | 349–54 |  |  |
| 96 | 8.5 Logarithmic Functions | 354–59 | Quiz 2 (8.3–8.4)  Graphing Calculator: Graphing Exponential and Logarithmic Functions |  |
| 97 | 8.6 Properties of Logarithms | 359–63 |  | preaching the gospel to all people\* |
| 98 | 8.7 Exponential and Logarithmic Equations | 364–69 | Quiz 3 (8.5–8.6) |  |
| 99 | Math in History—John Napier  8.8 Natural Logarithms | 370–76 | Practice with Logarithms | contrasting corruptible (decay) and incorruptible\* |
| 100 | Dominion Modeling | 377–78 | Quiz 4 (8.7–8.8)  Enrichment: Modeling Sound  TTK CD: Resources | our bodies belong to God  caring for the needs of others |
| 101 | Chapter 8 Review  College Entrance Test Preparation | 379–81 | Mathardy: Ch. 8 |  |
| 102 | Chapter 8 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 9: Rational Expressions and Equations** | | | | |
| 103 | 9.1 Simplifying Rational Expressions | 382–87 |  | Biblical Worldview Connection; revealing God’s image through creating beautiful music |
| 104 | 9.2 Multiplying and Dividing Rational Expressions | 388–91 |  | doing all to the glory of God\* |
| 105 | 9.3 Adding and Subtracting Rational Expressions | 392–97 | Quiz 1 (9.1–9.2)  Practice with Rational Expressions |  |
| 106 | 9.4 Solving Rational Equations | 398–403 | Practice with Rational Equations  TTK CD: Resources | working honorably for the Lord\* |
| 107 | 9.3–9.4 review |  | Quiz 2 (9.3–9.4) |  |
| 108 | 9.5 Graphing Reciprocal Functions | 405–11 |  |  |
| 109 | 9.6 Graphing Rational Functions | 411–17 | Practice with Rational Functions  Graphing Calculator: Graphing Rational Functions |  |
| 110 | Technology Corner  9.5–9.6 review | 418 | Quiz 3 (9.5–9.6)  Enrichment: Pushing Rational Functions to Their Limits |  |
| 111 | 9.7 Variations | 419–24 |  |  |
| 112 | Algebra Around the World—German Math  Dominion Modeling | 404, 425–26 | Quiz 4 (9.7) | God’s will\*  biblical connections to music  biblical music, both vocal and instrumental\*  created for God’s glory\* |
| 113 | Chapter 9 Review  College Entrance Test Preparation | 427–29 | Mathardy: Ch. 9 |  |
| 114 | Chapter 9 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 10: Trigonometry** | | | | |
| 115 | 10.1 Right Triangle Trigonometry | 430–37 | Bible Integration: Bible, Math, and Geography | Biblical Worldview Connection; understanding and using God-given resources  God saw His creation as good\*  Earth’s geography changed by the Flood\* |
| 116 | 10.2 Solving Right Triangles | 438–44 | Practice with Triangles and Trigonometry  Math History: Hipparchus of Rhodes  TTK CD: Visuals |  |
| 117 | 10.3 Trigonometry in the Coordinate Plane | 445–49 | Quiz 1 (10.1–10.2)  TTK CD: Visuals |  |
| 118 | 10.4 Radians and the Unit Circle  Technology Corner | 450–55 | TTK CD: Visuals and Resources |  |
| 119 | 10.3–10.4 review |  | Quiz 2 (10.3–10.4) |  |
| 120 | 10.5 Graphs of Sine and Cosine Functions  Math in History—Leonhard Euler | 456–63 | Graphing Calculator: Graphing the Sine Function  Practice with Trigonometric Functions | Euler’s identity reflects the order and beauty in God’s creation |
| 121 | 10.6 Graphs of Other Trigonometric Functions | 464–69 |  |  |
| 122 | 10.5–10.6 review |  | Quiz 3 (10.5–10.6) |  |
| 123 | 10.7 Translating Trigonometric Functions | 469–74 |  |  |
| 124 | 10.8 Inverse Trigonometric Functions | 475–80 | Enrichment: Inverse Trigonometric Functions  Practice with Inverse Trigonometric Functions |  |
| 125 | Dominion Modeling | 481–82 | Quiz 4 (10.7–10.8) | man’s limited ability to model God’s creation |
| 126 | Chapter 10 Review  College Entrance Test Preparation | 483–85 | Mathardy: Ch. 10  Cumulative Review |  |
| 127 | Chapter 10 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 11: Trigonometric Identities** | | | | |
| 128 | 11.1 Law of Sines | 486–92 | TTK CD: Visuals | Biblical Worldview Connection; developing models of the earth’s surface to better use and care for the land |
| 129 | 11.2 Law of Cosines | 493–97 |  |  |
| 130 | Technology Corner  11.1–11.2 review | 497 | Quiz 1 (11.1–11.2)  Enrichment: Other Trigonometric Functions  Practice with Trigonometric Problems |  |
| 131 | 11.3 Basic Identities  Algebra Around the World—British Math | 498–502 |  |  |
| 132 | 11.4 Verifying Identities | 503–6 |  |  |
| 133 | 11.5 Sum and Difference Identities | 506–11 | Quiz 2 (11.3–11.4)  Practice with Identities and Equations  TTK CD: Visuals |  |
| 134 |
| 135 | 11.6 Trigonometric Equations | 511–15 | Graphing Calculator: Finding Solutions to Trigonometric Equations |  |
| 136 |
| 137 | Dominion Modeling | 516 | Quiz 3 (11.5–11.6) | impacting the lives of others for eternity  consideration for others involving landmarks\* |
| 138 | Chapter 11 Review  College Entrance Test Preparation | 517–19 | Mathardy: Ch. 11  Cumulative Review |  |
| 139 | Chapter 11 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 12: Sequences and Series** | | | | |
| 140 | 12.1 Introduction to Sequences  Technology Corner | 520–27 | Math History Timeline | Biblical Worldview Connection; applying scriptural principles in making wise financial decisions |
| 141 | 12.2 Arithmetic Sequences | 528–32 |  |  |
| 142 | 12.1–12.2 review |  | Quiz 1 (12.1–12.2) |  |
| 143 | 12.3 Geometric Sequences | 533–37 | Practice with Sequences |  |
| 144 | 12.4 Arithmetic Series and Sigma Notation | 538–42 | Appendix K, Mathematical Careers |  |
| 145 | 12.3–12.4 review |  | Quiz 2 (12.3–12.4) |  |
| 146 | Math in History—Emmy Noether  12.5 Geometric Series | 543–48 | Practice with Series  Enrichment: Repeating Decimals  TTK CD: Resources |  |
| 147 | 12.6 Mathematical Induction | 549–52 | Appendix L, Math and the Bible  Bible Integration: Reflecting on Keister’s Paper “Math and the Bible” | arithmetic examples exist in Scripture\*  mathematical properties and logic in the Bible\* |
| 148 | 12.5–12.6 review |  | Quiz 3 (12.5–12.6)  Enrichment: Area Under a Curve |  |
| 149 | Dominion Modeling | 553–54 |  | biblical principles of finance |
| 150 | Chapter 12 Review  College Entrance Test Preparation | 555–57 | Mathardy: Ch. 12  Cumulative Review |  |
| 151 | Chapter 12 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 13: Probability and Statistics** | | | | |
| 152 | 13.1 Counting Principles | 558–65 | Practice with Counting Problems | Biblical Worldview Connection; avoiding unnecessary risks and protecting lives and jobs |
| 153 | 13.2 Basic Probability | 565–71 | Enrichment: Experimenting with Theoretical Probabilities  TTK CD: Resources | God establishes all things |
| 154 | 13.1–13.2 review |  | Quiz 1 (13.1–13.2) |  |
| 155 | 13.3 Compound Events | 571–77 | Appendix M, Considering Cards  Bible Integration: Reflecting on a Biblical View of Gambling  TTK CD: Visuals | greed condemned  gambling ensnares  being controlled by the Holy Spirit  casting lots examined in both Old and New Testaments\*  recognizing that everything belongs to God\* |
| 156 | 13.4 The Binomial Probability Distribution | 577–82 | Bible Integration: Bible, Math, and Foreign Language | language comes from God\*  mathematics is helpful in planning for Bible translations; having the Scriptures in hand will help with the spread of the gospel\* |
| 157 | Algebra Around the World—French Math  13.3–13.4 review | 583 | Quiz 2 (13.3–13.4) |  |
| 158 | 13.5 Describing Data | 584–89 | TTK CD: Resources |  |
| 159 | 13.6 Organizing Data  Technology Corner | 590–96 | Enrichment: Simpson’s Paradox—How More Becomes Less  TTK CD: Resources |  |
| 160 | 13.5–13.6 review |  | Quiz 3 (13.5–13.6) |  |
| 161 | 13.7 The Normal Distribution | 597–601 | Practice with Probability and Statistics  TTK CD: Resources | recognizing that many characteristics of creation can be modeled by a normal distribution |
| 162 | 13.8 Making Inferences | 602–7 | Graphing Calculator: Calculating Statistical Measures  TTK CD: Resources |  |
| 163 | Dominion Modeling | 608–9 | Quiz 4 (13.7–13.8)  TTK CD: Resources | obeying authorities  being concerned for the well-being of others |
| 164 | Chapter 13 Review  College Entrance Test Preparation | 610–13 | TTK CD: Resources  Mathardy: Ch. 13  Cumulative Review |  |
| 165 | Chapter 13 Test | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chapter 14: Conic Sections and Quadratic Systems** | | | | |
| 166 | 14.1 Circles | 614–20 | Math History: Carl Jacobi  Bible Integration: Bible, Math, and Art | Biblical Worldview Connection; modeling mathematically both celestial and terrestrial motion  God commanded art to be used in the temple, and mathematics is useful in the creation of art\* |
| 167 | 14.2 Parabolas | 622–26 | Practice with Circles and Parabolas |  |
| 168 | Technology Corner  Math in History—John Wallis | 621, 649 | Quiz 1 (14.1–14.2) |  |
| 169 | 14.3 Ellipses | 627–33 | Handout: Derivation of the Equation of an Ellipse  Practice with Ellipses  TTK CD: Visuals |  |
| 170 | 14.4 Hyperbolas | 633–39 | Handout: Derivation of the Equation of a Hyperbola  Practice with Hyperbolas  TTK CD: Visuals |  |
| 171 | 14.3–14.4 review |  | Quiz 2 (14.3–14.4) |  |
| 172 | 14.5 Identifying Conics | 639–44 | Graphing Calculator: Graphing Conic Sections |  |
| 173 | 14.6 Systems with Quadratic Relations | 644–48 | Graphing Calculator: Solving Quadratic Systems |  |
| 174 | 14.5–14.6 review |  | Quiz 3 (14.5–14.6) |  |
| 175 | Dominion Modeling | 650–51 |  | the infinite power and wisdom of God revealed from observation of the heavens  worshiping the Creator and not the objects of His creation  recognizing an individual’s value in God’s sight |
| 176 | Chapter 14 Review  College Entrance Test Preparation | 652–54 | Mathardy: Ch. 14  Cumulative Review |  |
| 177 | Chapter 14 Test | | | |
| 178 | Review for Final Exam | | | |
| 179 | Review for Final Exam | | | |
| 180 | Final Exam (Chapters 8–14) | | | |