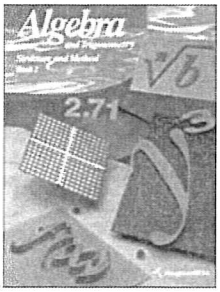
ShareWorld Learning Center
2020 06/15~08/05 Algebra 2 & Trigonometry

Instructor: Michael Lee

Textbook: Algebra and Trigonometry – Structure and Method • Book 2
ISBN: 0395585368 (0-395-58536-8), or 0395771188, or 0395977258, or



...

Date	Syllabus	Date	Syllabus
06-15	Chapter 1 – Basic Concepts of Algebra 1.1 Real Numbers and Their Graphs 1.2 Simplifying Expressions 1.3 Basic Properties of Real Numbers 1.4 Sums and Differences 1.5 Products 1.6 Quotients 1.7 Solving Equations in One Variable 1.8 Words into Symbols 1.9 Problem Solving with Equations Homework: P.55~56 #1~18 Chapter 2 – Working with Inequalities 2.1 Solving Inequalities in One Variable 2.2 Solving Combined Inequalities 2.3 Problem Solving Using Inequalities 2.4 Absolute Value in Open Sentences 2.5 Solving Absolute Value Sentences Graphically 2.6 Theorems and Proofs 2.7 Theorems about Order and Absolute Value Homework: P.93~94 #1~13 Homework: P.99 #1~7	06-17	Review/Test (Chapter 1~2) Symbolic Logic: Boolean Algebra Chapter 3 – Linear Equations and Their Graphs 3.1 Open Sentences in Two Variables 3.2 Graphs of Linear Equations in Two Variables 3.3 The Slope of a Line 3.4 Finding an Equation of a Line 3.5 Systems of Linear Equations in Two Variables 3.6 Problem Solving: Using Systems 3.7 Linear Inequalities in Two Variables 3.8 Functions 3.9 Linear Functions 3.10 Relations Homework: P.162~163 #1~18
06-22	Review/Test (Chapter 3)	06-24	Review/Test (Chapter 4)

	Chapter 4 – Products and Factors of Polynomials 4.1 Polynomials 4.2 Using Laws of Exponents 4.3 Multiplying Polynomials 4.4 Using Prime Factorization 4.5 Factoring Polynomials 4.6 Factoring Quadratic Polynomials 4.7 Solving Polynomial Equations 4.8 Problem Solving Using Polynomial Equations 4.9 Solving Polynomial Inequalities Homework: P.207~208 #1~19 Homework: P.209 #1~7		Chapter 5 – using the Laws of Exponents 5.1 Quotients of Monomials 5.2 Zero and Negative Exponents 5.3 Scientific Notation and Significant Digits 5.4 Rational Algebraic Expressions 5.5 Product and Quotients of Rational Expressions 5.6 Sums and Differences of Rational Expressions 5.7 Complex Fractions 5.8 Fractional Coefficients 5.9 Fractional Equations Homework: P255~256 #1~18
06-29	Review/Test (Chapter 5) Chapter 6 – Irrational and Complex Numbers 6.1 Roots of Real Numbers 6.2 Properties of Radicals 6.3 Sums of Radicals 6.4 Binomials Containing Radicals 6.5 Equations Containing Radicals 6.6 Rational and Irrational Numbers 6.7 The Imaginary Number i 6.8 The Complex Numbers Homework: P.302~303 #1~16 Homework: P.305 #1~8	07-01	Continue Chapter 6 – Irrational and Complex Numbers 6.1 Roots of Real Numbers 6.2 Properties of Radicals 6.3 Sums of Radicals 6.4 Binomials Containing Radicals 6.5 Equations Containing Radicals 6.6 Rational and Irrational Numbers 6.7 The Imaginary Number i 6.8 The Complex Numbers Homework: P.302~303 #1~16 Homework: P.305 #1~8
07-06	Review/Test (Chapter 6) Chapter 7 – Solving Quadratic Equations 7.1 Completing the Square 7.2 The Quadratic Formula 7.3 The Discriminant 7.4 Equations in Quadratic Form 7.5 Graphing $y - k = a(x - h)^2$ 7.6 Quadratic Functions 7.7 Writing Quadratic Equations and Functions Homework: P.346~347 #1~15	07-08	Review/Test (Chapter 7) Chapter 8 - Variation and Polynomial Equations 8.1 Direct Variation and Proportion 8.2 Inverse and Joint Variation 8.3 Dividing Polynomials 8.4 Synthetic Division 8.5 The Remainder and Factor Theorems 8.6 Some Useful Theorems 8.7 Finding Rational Roots Homework: P.397~398 #1~13 Homework: P.399 #1~9
07-13	Review/Test (Chapter 8) Chapter 9 – Analytic Geometry 9.1 Distance and Midpoint Formulas 9.2 Circles 9.3 Parabolas 9.4 Ellipses 9.5 Hyperbolas 9.6 More on Central Conics 9.7 The Geometry of Quadratic Systems	07-15	Continue Chapter 9 – Analytic Geometry 9.1 Distance and Midpoint Formulas 9.2 Circles 9.3 Parabolas 9.4 Ellipses 9.5 Hyperbolas 9.6 More on Central Conics 9.7 The Geometry of Quadratic Systems

	9.8 Solving Quadratic Systems 9.9 Systems of Linear Equations in Three Variables Homework: P.451~453 #1~20		9.8 Solving Quadratic Systems 9.9 Systems of Linear Equations in Three Variables Homework: P.451~453 #1~20
07-20	Test (Chapter 9) Chapter 10 - Exponential and Logarithmic Functions 10.1 Rational Exponents 10.2 Real Number Exponents 10.3 Composition and Inverses of Functions 10.4 Definition of Logarithms 10.5 Laws of Logarithms 10.6 Applications of Logarithms 10.7 Problem Solving: Exponential Growth and Decay 10.8 The Natural Logarithm Function Homework: P.496~497 #1~16 Homework: P.499 #1~8	07-22	Continue Chapter 10 – Exponential and Logarithmic Functions 10.1 Rational Exponents 10.2 Real Number Exponents 10.3 Composition and Inverses of Functions 10.4 Definition of Logarithms 10.5 Laws of Logarithms 10.6 Applications of Logarithms 10.7 Problem Solving: Exponential Growth and Decay 10.8 The Natural Logarithm Function Homework: P.496~497 #1~16 Homework: P.499 #1~8
07-27	Test (Chapter 10) Chapter 12 – Triangle Trigonometry 12.1 Angles and Degree Measure 12.2 Trigonometric Functions of Acute Angles 12.3 Trigonometric Functions of General Angles 12.4 Values of Trigonometric Functions 12.5 Solving Right Triangles 12.6 The Law of Cosines 12.7 The Law of Sines 12.8 Areas of Triangles Homework: P.602~604 #1~20 Homework: P.605 #1~8	07-29	Continue Chapter 12 – Triangle Trigonometry 12.1 Angles and Degree Measure 12.2 Trigonometric Functions of Acute Angles 12.3 Trigonometric Functions of General Angles 12.4 Values of Trigonometric Functions 12.5 Solving Right Triangles 12.6 The Law of Cosines 12.7 The Law of Sines 12.8 Areas of Triangles Homework: P.602~604 #1~20 Homework: P.605 #1~8
08-03	Test (Chapter 12) Chapter 13 – Trigonometric Graphs; Identities 13.1 Radian Measure 13.2 Circular Functions 13.3 Periodicity and Symmetry 13.4 Graphs of the Sine and Cosine 13.5 Graphs of the Other Functions 13.6 The Fundamental Identities 13.7 Trigonometric Addition Formulas 13.8 Double-Angle and Half-Angle Formulas 13.9 Formulas for the Tangent Homework: P.655~656 #1~18	08-05	Continue Chapter 13 – Trigonometric Graphs; Identities 13.1 Radian Measure 13.2 Circular Functions 13.3 Periodicity and Symmetry 13.4 Graphs of the Sine and Cosine 13.5 Graphs of the Other Functions 13.6 The Fundamental Identities 13.7 Trigonometric Addition Formulas 13.8 Double-Angle and Half-Angle Formulas 13.9 Formulas for the Tangent Homework: P.655~656 #1~18