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 2023 06/19~08/09 Algebra 2 \& Trigonometry
## Instructor: Michael Lee

Textbook: Algebra and Trigonometry - Structure and Method • Book 2
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| 06-19 | Chapter 1 - Basic Concepts of Algebra <br> 1.1 Real Numbers and Their Graphs <br> 1.2 Simplifying Expressions <br> 1.3 Basic Properties of Real Numbers <br> 1.4 Sums and Differences <br> 1.5 Products <br> 1.6 Quotients <br> 1.7 Solving Equations in One Variable <br> 1.8 Words into Symbols <br> 1.9 Problem Solving with Equations <br> Homework: P.55~56 \#1~18 <br> Chapter 2 - Working with Inequalities <br> 2.1 Solving Inequalities in One Variable <br> 2.2 Solving Combined Inequalities <br> 2.3 Problem Solving Using Inequalities <br> 2.4 Absolute Value in Open Sentences <br> 2.5 Solving Absolute Value Sentences Graphically <br> 2.6 Theorems and Proofs <br> 2.7 Theorems about Order and Absolute Value <br> Homework: P.93~94 \#1~13 <br> Homework: P.99\#1~7 | 06-21 | Review/Test (Chapter 1~2) <br> Symbolic Logic: Boolean Algebra <br> Chapter 3 - Linear Equations and <br> Their Graphs <br> 3.1 Open Sentences in Two Variables <br> 3.2 Graphs of Linear Equations in <br> Two Variables <br> 3.3 The Slope of a Line <br> 3.4 Finding an Equation of a Line <br> 3.5 Systems of Linear Equations in <br> Two Variables <br> 3.6 Problem Solving: Using Systems <br> 3.7 Linear Inequalities in Two <br> Variables <br> 3.8 Functions <br> 3.9 Linear Functions <br> 3.10 Relations <br> Homework: P.162~163 \#1~18 |
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|  | 4.8 Problem Solving Using <br> Polynomial Equations <br> 4.9 Solving Polynomial Inequalities <br> Homework: P.207~208 \#1~19 <br> Homework: P. 209 \#1~7 |  | 5.6 Sums and Differences of Rational Expressions <br> 5.7 Complex Fractions <br> 5.8 Fractional Coefficients <br> 5.9 Fractional Equations <br> Homework: P255~256 \#1~18 |
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| 07-03 | Review/Test (Chapter 5) <br> Chapter 6 - Irrational and Complex Numbers <br> 6.1 Roots of Real Numbers <br> 6.2 Properties of Radicals <br> 6.3 Sums of Radicals <br> 6.4 Binomials Containing Radicals <br> 6.5 Equations Containing Radicals <br> 6.6 Rational and Irrational Numbers <br> 6.7 The Imaginary Number i <br> 6.8 The Complex Numbers <br> Homework: P.302~303 \#1~16 <br> Homework: P. 305 \#1~8 | 07-05 | Continue <br> Chapter 6 - Irrational and Complex Numbers <br> 6.1 Roots of Real Numbers <br> 6.2 Properties of Radicals <br> 6.3 Sums of Radicals <br> 6.4 Binomials Containing Radicals <br> 6.5 Equations Containing Radicals <br> 6.6 Rational and Irrational Numbers <br> 6.7 The Imaginary Number i <br> 6.8 The Complex Numbers <br> Homework: P.302~303 \#1~16 <br> Homework: P. 305 \#1~8 |
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| 07-24 | Review/Test (Chapter 9) Chapter 10 - Exponential and Logarithmic Functions 10.1 Rational Exponents | 07-26 | Continue Chapter 10 - Exponential and Logarithmic Functions 10.1 Rational Exponents |


|  | 10.2 Real Number Exponents <br> 10.3 Composition and Inverses of Functions <br> 10.4 Definition of Logarithms <br> 10.5 Laws of Logarithms <br> 10.6 Applications of Logarithms <br> 10.7 Problem Solving: Exponential Growth and Decay <br> 10.8 The Natural Logarithm Function <br> Homework: P.496~497 \#1~16 <br> Homework: P.499 \#1~8 |  | 10.2 Real Number Exponents <br> 10.3 Composition and Inverses of Functions <br> 10.4 Definition of Logarithms <br> 10.5 Laws of Logarithms <br> 10.6 Applications of Logarithms <br> 10.7 Problem Solving: Exponential Growth and Decay <br> 10.8 The Natural Logarithm Function <br> Homework: P.496~497 \#1~16 <br> Homework: P. 499 \#1~8 |
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| 07-31 | Review/Test (Chapter 10) <br> Chapter 12 - Triangle Trigonometry <br> 12.1 Angles and Degree Measure <br> 12.2 Trigonometric Functions of Acute Angles <br> 12.3 Trigonometric Functions of General Angles <br> 12.4 Values of Trigonometric Functions <br> 12.5 Solving Right Triangles <br> 12.6 The Law of Cosines <br> 12.7 The Law of Sines <br> 12.8 Areas of Triangles <br> Homework: P.602~604 \#1~20 <br> Homework: P. 605 \#1~8 | 08-02 | Continue <br> Chapter 12 - Triangle Trigonometry <br> 12.1 Angles and Degree Measure <br> 12.2 Trigonometric Functions of Acute Angles <br> 12.3 Trigonometric Functions of General Angles <br> 12.4 Values of Trigonometric Functions <br> 12.5 Solving Right Triangles <br> 12.6 The Law of Cosines <br> 12.7 The Law of Sines <br> 12.8 Areas of Triangles <br> Homework: P.602~604 \#1~20 <br> Homework: P. 605 \#1~8 |
| 08-07 | Review/Test (Chapter 12) <br> Chapter 13 - Trigonometric Graphs; Identities <br> 13.1 Radian Measure <br> 13.2 Circular Functions <br> 13.3 Periodicity and Symmetry <br> 13.4 Graphs of the Sine and Cosine <br> 13.5 Graphs of the Other Functions <br> 13.6 The Fundamental Identities <br> 13.7 Trigonometric Addition <br> Formulas <br> 13.8 Double-Angle and Half-Angle Formulas <br> 13.9 Formulas for the Tangent <br> Homework: P.655~656 \#1~18 | 08-09 | Continue <br> Chapter 13 - Trigonometric Graphs; Identities <br> 13.1 Radian Measure <br> 13.2 Circular Functions <br> 13.3 Periodicity and Symmetry <br> 13.4 Graphs of the Sine and Cosine <br> 13.5 Graphs of the Other Functions <br> 13.6 The Fundamental Identities <br> 13.7 Trigonometric Addition <br> Formulas <br> 13.8 Double-Angle and Half-Angle Formulas <br> 13.9 Formulas for the Tangent <br> Homework: P.655~656 \#1~18 |

