## Advanced Algebra II $\sim 2^{\text {nd }}$ Semester Topics

| Chapter-Section | Topic | Example |
| :---: | :---: | :---: |
| p. 360 | Exponent Properties |  |
| T983 | Pythagorean Theorem |  |
| 13-2 | Special Right Triangles |  |
| 14-3 | Trigonometry - Solving Right Triangles |  |
| 11-1 | Counting Principal |  |
| 11-1 | Permutations |  |
| 11-1 | Combinations |  |
| 11-3 | Probability of Multiple Events |  |
| 6-1 | Roots and Radical Expressions | $\sqrt[4]{2401 x^{12}} 7\left\|x^{3}\right\|$ |
| 6-2 | Multiplying and Dividing Radical Expressions |  |
| 6-3 | Binomial Radical Expressions | $\frac{(1-\sqrt{7})(1+\sqrt{7})}{-6}$ |
| 6-4 | Rational Exponents |  |
| 6-5 | Solving Radical Equations |  |
| 6-6 | Function Operations | Composite Functions |
| 6-7 | Inverse Relations and Functions |  |
| 6-8 | Graphing Radical Functions |  |
| 7-1 | Exploring Exponential Models |  |
| 7-2 | Euler's Number |  |
| 7-3 | Logarithmic Functions as lnverses | Graphing |

Properties of Logarithms
Exponential and Logarithmic Equations
Natural Logarithms
Inverse Variation
Graphing Rational Functions in Standard Form
Rational Functions and Their Graphs
Rational Expressions
Simplifying $/ \times / \div$

Adding and Subtracting Rational Expressions
Solving Rational Equations
Exploring Conic Sections
Parabolas
Circles

