

**Honors Algebra 2**

Mrs. Poncin

**Chapter 7  
Powers, Roots, and Complex  
Numbers****Preceding Unit  
Rational Expressions and  
Equations****Questions**

Can I?.....

1. Find the roots of real numbers?
2. Simplify expressions involving radicals, sums, products, and quotients of radicals?
3. Solve radical expressions?
4. Find and use decimal representations of real numbers?
5. Use  $i$  to simplify square roots of negative numbers?
6. Add, subtract, multiply, and divide complex numbers?

**Common Core Math Standards**

## Number and Quantity

- Rewrite expressions involving radicals and rational exponents using the properties of exponents
- Know complex numbers in the form  $a + bi$
- Perform operations and apply properties with complex numbers
- Find the conjugate of a complex number

## Algebra

- Solve radical equations in one variable and give examples of how extraneous solutions may arise

**Notes from Mrs. Poncin**

Similar to fractions, square roots are more exact when simplified, but not as decimals. A solid base of number factors is important.

**College Readiness Standards**

## 3. Numbers: Concepts &amp; Properties

- Use the inverse relationship for exponentiation and root extraction
- Perform operations and apply properties with complex numbers
- Work with squares, cubes, square roots, cube roots
- Apply rules of exponents

## 4. Expressions, Equations, &amp; Inequalities:

- Manipulate radical expressions

**Unit Sequence**

Mon 1/5	Review Final Exam – Most Missed Questions
Tues 1/6	7.2 Multiply and Simplify Radical Expressions <b>Assignment A: Worksheet</b>
Wed 1/7	7.3 Operations with Radical Expressions <b>Assignment B: Assignment B: pg. 303 #1-51 every other odd; pg. 308 #1-53 every other odd</b>
Thurs 1/8	7.4 Finish Operations with Radical Expressions <b>Assignment C: Review All Operations</b>
Fri 1/9	<b>Assignment D: Review 7.1-7.4; Concept Check</b>
Mon 1/12	7.5 Rational Numbers as Exponents <b>Assignment E: pg. 315 #3-72 m 3</b>
Tues 1/13	Finish 7.5 + Factoring <b>Assignment F: Worksheet 5.7</b>
Wed 1/14	Review 7.1-7.5 <b>Assignment G: Mid-chapter 7 Review</b>
Thurs 1/15	<b>Mid-chapter Test 7.1-7.5</b>
Tues 1/20	7.7 Imaginary & Complex Numbers <b>Assignment H: pg. 323 #1-47 odd, skip 41</b>
Wed 1/21	7.9 More Complex Numbers; <b>Concept Check</b> <b>Assignment I: pg. 329 #3-27 m3, 36, 37; pg. 333 #17, 19, 21</b>
Thurs 1/22	7.6/7.10 Investigation Solving Radical Eqns; <b>Concept Check</b>
Fri 1/23	Finish 7.6/7.10 Solutions of Radical Equations <b>Assignment J: pg. 319 #3-45 m 3; pg. 333 #1, 3, 5</b>
Mon 1/26	Applications <b>Assignment K: Word problem worksheet</b>
Tues 1/27	Review Chapter 7 <b>Assignment L: Chapter Review</b>
Wed 1/28	<b>Chapter 7 Test</b>