Algebra 2 Honor Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Final Exam Review

**Important Facts about the Final Exam:**

1. You must bring your own calculator to the exam. Sharing of calculators during the exam is prohibited. Using your cell phone as a calculator is prohibited too!!

2. You may use the formula sheet provided for you, and only the formula sheet!!

3. Bring plenty of #2 pencils to fill out the Scantron answer sheet.

4. The test has approximately:

* 17 multiple-choice questions. The answers for these questions will go on a Scantron.

The work for these question will not be looked at.

* 17 open-response questions where you write your answers on a separate answer sheet. Your work will be looked at on these questions

5. You have 90 minutes to take the exam. You will not be allowed to leave the room once the exam has begun and must stay in the room for the entire 90 minutes. No extra time will be provided unless you have an IEP or a 504 and make arrangements with me before the exam. If you miss the exam or are late because you overslept, forgot, car wouldn’t start… you will not be given extra time or a retake. You will be given a 0.

6. The exam will count as 20% of your second semester grade. (That’s 10% of your final grade!)

**Suggestions for How to Study:**

1. Read through the topics list and do practice problems.
2. Make flash cards of formulas, ideas, vocabulary words, methods, etc. that you don’t remember from the topics list and practice problems.
3. Review old spirals and reviews. Redo the problems that gave you trouble…all of the reviews are up on the website! (www.giaquinta.weebly.com)
4. Read the chapter summaries. Remember, we didn’t do every section of every chapter, so they may contain extra information.
5. Come for extra help on material you don’t understand!!!

**Chapters & Sections covered:**

Chapter Sections Chapter Summary

6 **6-1, 6-2, 6-3, 6-4, 6-5, 6-6**  p. 465-468

7 **7-1, 7-2, 7-3, 7-4, 7-6, 7-7** p. 538-542

8 **8-1, 8-2, 8-3, 8-4, 8-6**  p. 602-606

12 **12-2, 12-3, 12-4**  p. 839-842

13 **13-1, 13-2, 13-4, 13-5, 13-6** p. 897-900

**Topics on the Final Exam:**

**Chapter 6:**

* + Multiply and simplify expressions with exponents (state restrictions)
  + Simplify radical expressions
  + Graph square root function
  + Solve square root equation (check for extraneous solutions!)
  + Solve cube root equation (check for extraneous solutions!)
  + Solve equations with rational exponents
  + Use function operations and compositions
  + Find inverse functions

**Chapter 7:**

* Graph exponential growth and decay functions
* Evaluate log expressions
* Switch from log to exponent form and back
* Solve exponential equations with the same base
* Solve log equations
* Solve continuous compounding modeling problem

**Chapter 8:**

* Divide rational expressions and simplify
* Simplify rational expressions (state restrictions)
* Find domain, range, vertical and horizontal asymptotes of rational function
* Solve rational equations

**Chapter 12:**

* Write arithmetic rule
* Find sum of arithmetic series
* Write geometric rule
* Find sum of infinite geometric series

**Chapter 13:**

* Evaluate right triangle trig functions (including reciprocal trig functions)
* Use right triangle trig to solve for missing sides or angles of triangles
* Apply Law of Sines to a triangle
* Apply Law of Cosines to a triangle
* Convert Radians to Degrees and back
* Find exact values for trig functions