

Math 1010 Chapters 7 & 8 Test Review

Reminders: No cell phones. Be sure to show your work and label the units. Don't talk to a person from another section about the test until both sections have taken it. Graphing must be done by you, not a graphing calculator.

Topics

- rational exponents and roots
- simplifying, adding, subtracting, multiplying, and dividing radicals
- solving equations with radicals (be careful of extraneous solutions!)
- point plot method
- complex numbers
- completing the square
- solving quadratic equations
- solving equations that are quadratic equations "in disguise"
- graphing parabolas
- solving quadratic inequalities

Memorize

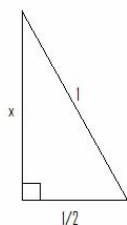
- rules of exponents
- rules of radicals
- first 15 perfect squares
- Pythagorean Theorem
- definition of i .
- the conjugate of a complex number
- quadratic formula
- how to find x and y intercepts
- how to find the vertex of a parabola

Extra Credit Review Problems (10 points, due when you take the test)

- List the rules of exponents and radicals
- 7.1: 1,7,23,40,45,71,78
- Fill in the table.

radical	exponent
$\sqrt{65}$	
	$23^{\frac{1}{3}}$
	$15^{\frac{4}{7}}$
$\sqrt[3]{3^5}$	

- 7.2: 16,21
- 7.3: 7,26,43,66
- Find the length of the unknown side.



- 7.4: 12,36
- 7.5: 10,21,33,40,51
- 7.6: 6,11,20,51 (use the point plot method)
- Give the definition of i .
- Give the conjugate of $a + bi$.
- 7.7: 2,7,31,48,63,72
- 8.1: 8,9,31,36
- Give the quadratic formula from memory.
- 8.2: 4,17,33,50
- 8.4: 8,17
- 8.5: 3,10
- 8.6: 3,25,41