

Name: _____ Date: _____ Block: _____

Algebra 2 Honors- Week 10 Homework

Monday-

Algebra 2

Name _____ ID: 1

Complete the Square Day 1

© 2013 Kuta Software LLC. All rights reserved.

Date _____ Period _____

Find the value that completes the square and then rewrite as a perfect square.

1) $p^2 + 22p + \underline{\hspace{1cm}}$

2) $x^2 + 18x + \underline{\hspace{1cm}}$

3) $x^2 - 13x + \underline{\hspace{1cm}}$

4) $x^2 - 3x + \underline{\hspace{1cm}}$

Solve each equation by completing the square.

5) $x^2 + 4x + 13 = 0$

6) $x^2 - 10x + 27 = 0$

7) $k^2 - 6k + 14 = 3$

8) $a^2 + 10a + 1 = 3$

Algebra 2

Name _____

Completing the Square Practice

© 2013 Kuta Software LLC. All rights reserved.

Date _____ Period _____

Solve each equation by completing the square.

1) $3a^2 + 6a + 19 = -3$

2) $3v^2 - 6v + 18 = -3$

3) $2n^2 - 4n - 12 = 4$

4) $3x^2 - 2x + 15 = -5$

5) $4v^2 - 9v - 12 = -3$

6) $5x^2 + 2x + 1 = 4$

7) How can you tell if a quadratic equation is going to have real or complex solutions?

Name: _____ Date: _____ Block: _____

Tuesday-

Algebra 2

Name _____ ID: 1

Complete the Square Practice Worksheet

© 2013 Kuta Software LLC. All rights reserved.

Date _____ Period _____

Solve each equation by completing the square.

1) $n^2 - 12n + 27 = 0$

2) $r^2 - 12r + 22 = 0$

3) $x^2 + 12x - 61 = 0$

4) $p^2 + 14p + 13 = 8$

5) $a^2 + 18a - 19 = 7$

6) $m^2 - 6m + 86 = -6$

7) $9n^2 + 18n + 15 = 10$

8) $6n^2 - 12n + 93 = -6$

Algebra 2

Name _____ ID: 1

Quadratic Formula Assignment

© 2013 Kuta Software LLC. All rights reserved.

Date _____ Period _____

Solve each equation with the quadratic formula.

1) $2n^2 - 4n + 2 = 0$

2) $x^2 + 2x - 24 = 0$

3) $2k^2 + 4k = 30$

4) $3p^2 + 6p = 9$

5) $-4x = -18 + 9x^2 - 6x$

6) $3n^2 - 2n - 8 = 7n^2 + 5n$

7) A square and rectangular garden plots have the same area. The rectangular plot is 5 feet longer than twice as long on one side and 6 feet shorter on the other. Find the dimensions of each plot.

8) A rectangular picture is 3 more inches than twice as long as it is wide. Find the dimensions of the picture if the area is 20 inches square.

Name: _____ Date: _____ Block: _____

Wednesday- Catch up on homework from last week and study for test tomorrow!

Practice Test for Complex Numbers and Quadratic Equations Unit

Learning Objectives:

- A. Classify numbers in the real number system.
- B. Simplify square roots.
- C. Simplify expressions with imaginary numbers.
- D. Perform operations with complex numbers.
- E. Solve quadratic equations using completing the square.
- F. Solve quadratic equations using the quadratic formula.

Question #	Learning Objective	Know It	Feel Unsure	Right	Wrong	Simple Mistake	Need to Study
1	A						
2	B						
3	C						
4	C						
5	C						
6	C						
7	D						
8	D						
9	D						
10	E						
11	E						
12	F						

1. List the numbers systems for which each is a member: a) -4 b) 3.001 c) $\sqrt{-18}$ d) 8 e) 0
2. Simplify: $\sqrt{450}$
3. Find three ways to write the side length of a square with an area of 150 in^2 .
4. Multiply: $5\sqrt{-6} \cdot 2\sqrt{-14}$
5. Add: $7\sqrt{-2} + 3\sqrt{-18}$
6. Find i^{34} .
7. Solve: $(2 + 3i) + (-3 + i)$.
8. Solve: $(2 + 3i) - (-3 + i)$.
9. Multiply: $(2 + 3i)(-3 + i)$.
10. Solve by completing the square: $x^2 + 6x + 17 = 0$.
11. Solve by completing the square: $2x^2 - 8x + 6 = 0$.
12. Solve with quadratic formula: $7x^2 - 2x + 9 = 0$.

Thursday- Test Day! (No Homework)

Friday- No School!