Concepts of Algebra 2 Notes **Section 4-4: Factoring Quadratic Expressions**

***Objectives:**

*factoring:

*Essential Understanding (as written on p. 216)

Got It? **1.** What is the expression in factored form?

a. $x^2 + 14x + 40$ **b.** $x^2 - 11x + 30$ **c.** $-x^2 + 14x + 32$

*greatest common factor (GCF) of an expression:

Got It? **2.** What is the expression in factored form?

a. $7n^2 - 21$ **b.** $9x^2 + 9x - 18$ **c.** $4x^2 + 8x + 12$

If $a \neq 1$, use the AC Method!

Got It? **3.** What is the expression in factored form? Check your answers.

a. $4x^2 + 7x + 3$ **b.** $2x^2 - 7x + 6$

*Example of a Perfect Square Trinomial:

*Factoring Perfect Square Trinomials

Got It? **4.** What is $64x^2 - 16x + 1$ in factored form?

*Factoring a Difference of Two Squares:

Got It? **5.** What is $16x^2 - 81$ in factored form?

Inclass: p. 221 #28, 30, 34, 44, 52
Homework: p. 221 #15-55(odd)
Interactmath: #15, 17, 19, 21, 23, 25, 26, 29, 33, 35, 38, 52, 53

Concepts of Algebra 2 Notes **Section 4-5: Quadratic Equations**

***Objectives:**

*zeros of the function:	*Diagram

*Zero-Product Property

Got It? **1.** What are the solutions of the quadratic equation $x^2 - 7x = -12$?
Got It? **2.** What are the solutions of the quadratic equation $4x^2 - 14x + 7 = 4 - x$?
Got It? **3.** What are the solutions of the quadratic equation $x^2 + 2x - 24 = 0$?

Inclass: p. 229 #16, 26
Homework: p. 229 #9-35(odd), not #21, 27, 29, 33, 35
Interactmath: #9, 12, 15, 17, 19, 25, 31