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| **Name:** | **David Young** | **Subject:** | **Algebra 2** | **Week of:**  | **9/16-9/20, 2013** |
| **Lesson Plans** |
|  | **Monday:** | **Tuesday:** | **Wednesday:** | **Thursday:** | **Friday:** |
| **Statement of** **Objective(s)/****Think, Know,****Do(start with a verb)** | **Students will identify quadratics and the properties within each function. Students will analyze and compare various quadratics and their characteristics** | **Students will factor quadratics with a=1** | **Students will factor quadratics with a > 1** | **Students will factor special case quadratics (difference of 2 squares,etc.)** | **Students will solve quadratics by applying graphing concepts (x intercepts) to each function. Students will connect the disciplines of root finding and factoring.** |
| **Anticipatory****Set/Opening** | **Think Pair Share- 5 minutes: “What do you know about quadractic functions?”** **WRITE ABOUT IT!!** | **Multiply (x-2)(x+5) and then graph result on calculator. Discuss something you notice about starting problem and standard function with partner.**  | **Describe a given quadratic as fully as possible w/o calculator** | **Quick Poll – Sketch Graph of y =** $(x-3)^{2}+2$**Can you find x intercepts from this?****WRITE ABOUT IT!** | **Write About:****Would the technique for factoring when a>1 work on problems when a=1? Explain.**  |
| **Learning****Activities** | **Teacher led explorations of functions.****Students will partner check work on Practice B.****Students will write about how the values of a,b, and c will impact the vertex and y intercept.** | **Student notes on factoring.****In pairs, students factor a set of functions, then trade with another group to check****Pg 331 – Factoring Review** | **Student Notes****Students will write about the similarities and differences between the 2 methods** | **Student Notes****Student led analysis of how a,b, and c impact the factoring techniques. Groups make predictions – share out and discuss with class.** | **Students will use calculators to graph quadratics and identify x intercepts.** Textbook pg 339: #47,60-63,67-70**Students will write about the connections between the actual x intercepts and the linear factors of a quadratic. – Partner Share**  |
| **Assessment of****Student****Understanding****/Closure** | **Observe/monitor student progress on worksheet.** | **Exit ticket: When are we allowed to use “the product of c that adds to b technique” of factoring? What is a purpose of factoring quadratics?** | **Parking Lot: What have you learned/what are you confused/unsure about?** | **Exit Ticket:** **Rank the 3 methods in order of how comfortable you are with them. 1 Very Comfortable 3 – OK 5 – No Way Can I do this** | **Quick Poll questions using TI nSpires or Exit tickets. Factor the quadratics.** |