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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 =**    **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.** |