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| **Name:** |  | | | **Subject:** | **Algebra 2** | | | **Week of:** | **January 13, 2104** | |
| **Lesson Plans** | | | | | | | | | | |
|  | | **Monday:** | **Tuesday:** | | | **Wednesday:** | **Thursday:** | | | **Friday:** |
| **Statement of**  **Objective(s)/**  **Think, Know,**  **Do(start with a verb)** | | **Students will use exponential growth and decay to analyze real world situations** | **Quiz** | | | **Students will explore exponential and logarithmic functions** | **Students will convert functions from exponential form to logarithmic form.** | | | **Students will continue to explore exponential and logarithmic functions.** |
| **Anticipatory**  **Set/Opening** | | **Write About:**  **Describe the difference in the graphs of an exponential growth vs. exponential decay function.** | **Quiz** | | | **Write About:**  **What are at least 4 things you know about exponential functions?** | **Bell ringer – Students will solve a real world compound interest problem. Page 495 #22 (in blue Alg. II book)** | | | **Bell ringer- using your conversion rules, create 2 examples that show a function being converted from exp. form to log. form and explain why your example is correct.** |
| **Learning**  **Activities** | | **Students Notes:**  **Summary comparison chart will be used for class discussion, and then students will use charts to write notes in their own words. Notes will be used as guide to complete Exponential Functions WS #1** | **Quiz** | | | **Student will engage in exp/log inverse & natural base worksheets**  **In pairs, students will work through the exp/log inverse exploration WS, conversation between students will allow them to make the connections between the graphs of the two functions. Class discussion will be used to clarify these concepts and to complete the natural base notes WS.** | **Students will use to exponential to logarithmic table activity to convert from exp form to log form. Students will form their own rules of these conversions, share their rules with a partner, and then share them aloud to the class.** | | | **Students will complete exponential and logarithmic WS #2 using notes and conceptions formed throughout the week.** |
| **Assessment of**  **Student**  **Understanding**  **/Closure** | | **Observe and Monitor student discussion/work** | **Quiz** | | | **Parking Lot: What have you learned/what are you confused/unsure about? Observe and monitor student discussion/work** | **Observe/monitor student progress on activity.**  **Exit Ticket- how does logarithmic form and exponential form relate? How do they differ?** | | | **Engage students in class discussion summarizing concepts learned, vocabulary, and rules to ensure understanding. Monitor student work on activity.** |