Acquisition Lesson Planning Form
Key Standards addressed in this Lesson: MM2A4b & MM2A4c
Time allotted for this Lesson: 9 hours

Essential Question: LESSON 3 – Solving Quadratic Equations and Inequalities
How do you solve quadratic equations and inequalities both graphically and algebraically?
Activating Strategies: (Learners Mentally Active)
Use collaborative pairs to review factoring trinomials of the form $ax^2 + bx + c = 0$ with $a \neq 1$ and the GCF $\neq 1$.
Acceleration/Previewing: (Key Vocabulary)
Factor by grouping, Zero Factor Property, quadratic function, binomial, quadratic equation, quadratic formula, standard form of quadratic equation, discriminant, radical expression, quadratic inequality
Teaching Strategies: (Collaborative Pairs; Distributed Guided Practice; Distributed Summarizing; Graphic Organizers)
- Have a place in your room for the word wall. As you reach each term, have it written on a card and let a student place it on the wall. This works well with KWL chart. The first couple of minutes of each class could be used to let the students review the words on the wall.   - Mini Lesson on using the graphing calculator to solve equations and inequalities. (Pages 3 & 4) Be sure to input as two separate equations such as $y = 19000$ and $y = 960x - 12x^2$ to solve $19000 = 960x - 12x^2$. Also discuss with students how you know if a quadratic opens up or down, and how that determines if there is a minimum or maximum. Differentiate between what the max/min value is, and where it occurs.   - Small groups using guided distributed practice: Do Paula's Peaches Task #1 - #7 (Page 11). Students share results with the class.   - Just the Right Border Learning Task. Teacher-led discussion of the problem and part #1.   - Mini Lesson on the Quadratic Formula (Page 5) before part #2. Practice problems on page 6 are available for distributed guided practice. Mini Lesson on the Discriminant (Page 7) should be done before part #3. Students work in small groups on the remainder of the Just the Right Border Learning Task #2 and #3 (Page 15).   - Students complete parts #5 – 7 from Just the Right Border Learning Task in groups and share with the class.
Distributed Guided Practice/Summarizing Prompts: (Prompts Designed to Initiate Periodic Practice or Summarizing)
What are some special products and their factoring patterns?