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| **INSTRUCTIONAL OBJECTIVES:** Pages 115 – 121 (Chapter 1: *Inverse Relations and Inverse Functions*). |
| * Review the definitions of relation and function. |
| * Understand the definition of a *One-to-One Function.* |
| * Be able to use the *Vertical Line Test* and the *Horizontal Line Test* to identify *One to One Functions.* |
| * Find the inverse of a function. |
| * Know when to use inverse functional notation. |
| * Know how to prove that 2 functions are inverses of each other by the appropriate use of composition. |
| * Define a relation parametrically. |
| * **Technology:** Smart Board, graphing calculator (TI-83 or TI-84). |

***TUESDAY, 9.24.24***

**Discuss the previously assigned work:** Test Review: Inverse Functions and Parametric Mode.

**Class Work:**

* Page 163, ***Quick Review***, #1, 3, 5 – 10.
* Page 163, ***Exercises***, #7, 9, 11.

**CHAPTER 2: *Quadratic Functions and Their Graphs* (Pages 158-162)**

**Key Concepts**: Quadratic Function, Parabola, Axis of Symmetry, Vertex, Concave Upward, Concave Downward, Maximum, Minimum, Vertex Quadratic Form, Standard Quadratic Form, X-Intercept, Zero, Y-Intercept

**Essential Questions:**  In what ways are you able to characterize the graph of a quadratic function, both in standard and in vertex forms? How can you use your graphing calculator to characterize the graph of a quadratic function? How can you use quadratic functions to solve real-life problems?

**Objective:** The student will demonstrate an understanding of the characteristics of functions.

**Technology:** Graphing calculator (TI-84).

* Discuss vertex-quadratic form and how you can use this form to quickly graph a parabola.

**Homework:**

* **Study for** **the Test: Inverse Functions and Parametric Mode** to be taken during your next class period. You may use one sheet of paper, 8.5 by 11 inches, front and back, when you take this test.
* Page 163, ***Exercises***, #13 – 18.

***THURSDAY, 9.26.24***

**Discuss the previously assigned problems:** Page 163, ***Exercises***, #13 – 18.

**Test: Inverse Functions and Parametric Mode.**  You may use one sheet of paper, 8.5 by 11 inches, front and back, when you take this test.

**Class Work/Homework:**

* Read and take notes on pages 158 – 160.
* Page 163: #19 – 25, odds.

***FRIDAY, 9.27.24***

**Discuss the previously assigned work:** Page 163: #19 – 25, odds.

Learn how to transform standard quadratic form into vertex quadratic form.

**Class Work/Homework:** Pages 163, 164 (#27 – 32, 39, 41, 43).