|  |
| --- |
| **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). |

**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).

***TUESDAY, 10.15.24***

**Student Presentations of the following problems. Please enter your work into Google Classroom before the beginning of this class.**

**Class Work/Homework:** Page 241 (#3 – 8, 13 – 15).

These students will present their solutions to the class.

**(3) ISAAC BOROUGHS**

**(4) HAYDEN**

**(5) ANOUSHA**

**(6) ELIZABETH**

**(7) ABBY**

**(8) SEANNA**

**(13) RUBEN**

**(14) CYLAR**

**(15) CAMILA**

**(16) ALEX**

**(16) ABANOUB**

**Class Work/Homework: Handout (6 Quadratic Modeling Problems)**

***THURSDAY, 10.17.24* STUDENT-LED CONFERENCES, NO CLASS**

***FRIDAY, 10.18.24* A-DAY, NO CLASS**