|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Standards-Based Lesson** | | | | **Tuesday, August 6 – Friday, August 30** | | |
| **Accelerated Coordinate Algebra/ Analytic Geometry A** | | | | | | |
| Teacher: Elliott | | Unit 4: Functions | | | | |
| **STANDARDS – CCGPS** | | | | | | |
| **Define, evaluate, and compare functions.**  **MCC8.F.1** Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.  **MCC8.F.2** Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). | | | | | | |
| **OBJECTIVES: Students will know… or Students will be able to…** | | | | | | |
| * recognize a relationship as a function when each input is assigned to exactly one unique output; * reason from a context, a graph, or a table, after first being clear which quantity is considered the input and which is the output; * produce a counterexample: an “input value” with at least two “output values” when a relationship is not a function; * explain how to verify that for each input there is exactly one output; and * translate functions numerically, graphically, verbally, and algebraically. | | | | | | |
| **ESSENTIAL QUESTIONS** | | | | | | |
| * What is a function? * What are the characteristics of a function? * How do you determine if relations are functions? * How is a function different from a relation? * Why is it important to know which variable is the independent variable? * How can a function be recognized in any form? * What is the best way to represent a function? * How do you represent relations and functions using tables, graphs, words, and algebraic equations? * What strategies can I use to identify patterns? * How does looking at patterns relate to functions? * How are sets of numbers related to each other? * How can you use functions to model real-world situations? * How can graphs and equations of functions help us to interpret real-world problems? | | | | | | |
| **VOCABULARY** | | | | | | |
| * Domain * Range * Function * Graph * X coordinate * Y coordinate * Coordinate plane | | | | | | |
| **PRE-ASSESSMENT** | | | | | | |
| * Unit 4 Pre-Assessment | | | | | | |
| **PRIOR TO ACTIVATION (CRCT/EOCT PRACTICE)** | | | | | | |
| **Bell Ringer -**   * Students complete questions independently * Have students compare answers and work with their table buddies. * Assist students as needed. * Review Bell Ringer   **Sources:**   * [Holt (7th Grade) CRCT Countdown](file:///C:\Users\noreen.elliott\Documents\2013-2014%20Coordinate%20Algebra\Math%207\countdown_to_crct.doc) * Wach (7th Grade) Warm-ups * [Holt (](file:///C:\Users\noreen.elliott\Documents\2013-2014%20Coordinate%20Algebra\Math%207\countdown_to_crct.doc)8[th Grade) CRCT Countdown](file:///C:\Users\noreen.elliott\Documents\2013-2014%20Coordinate%20Algebra\Math%207\countdown_to_crct.doc) * Wach (8th Grade Warm-ups) | | | | | | |
|  | | | | | | |
|  | **Activate (front screen)** | | **Instruction** | | **Practice/Application** | **Assignment** |
| **Mon 8/5** | TEACHER WORK DSAY | |  | |  |  |
| **Tues 8/6** | “How I Used Math This Summer” | | Procedures and expectations | |  |  |
| **Wed 8/7** | Begin “This is my life in math” | |  | | MAP Math 8 |  |
| **Thu 8/8** | Warm-up Holt 3.1  Pre-assessment Unit 4 | | Holt 3.1 Powerpoint | | Holt Worktext 3A “Ordered Pairs” | Holt Practice 3.1 |
| **Fri 8/9** | Review Homework from Thursday | |  | | GaDOE “ Secret Codes Part 1” | Holt Problem Solving 3.1 |
|  |  | |  | |  |  |
| **Mon 8/12** | Warm-up Holt 3.2  Review Homework from Friday | | Holt 3.2 Powerpoint | | Holt Worktext 3b “Graphing on the Coordinate Plane” | Holt Practice 3.2 |
| **Tue 8/13** | Review Homework from Monday | |  | | GaDOE “ Secret Codes Part 2” | Holt Problem Solving 3.2 |
| **Wed 8/14** | Warm-up Holt 3.2  Review Homework from Tuesday | | Holt 3.4 Powerpoint | | Holt Worktext 3d “Functions” | Holt Practice 3.4 |
| **Thu 8/15** | Review Homework from Wednesday | |  | | GaDOE “Vending Machine” | Holt Problem Solving 3.4 |
| **Fri 8/16** | Review Homework from Thursday | |  | | GaDOE “Order Matters” |  |
|  |  | |  | |  |  |
| **Mon 8/19** | Review homework from Friday | |  | | GaDOE “Which is Which?” |  |
| **Tue 8/20** | Review homework from Monday | |  | | MARS “Modeling Situations with Linear Equations” |  |
| **Wed 8/21** | Review Homework from Tuesday | |  | | MARS “Modeling Situations with Linear Equations” | Finish as HW: MARS “Modeling Situations with Linear Equations” |
| **Thu 8/22** | Review Homework from Wednesday | |  | | Review | Review Problems |
| **Fri 8/23** |  | |  | |  | Assessment Unit 4 |
|  |  | |  | |  |  |
|  |  | |  | |  |  |
| **DIFFERENTIATED INSTRUCTION** | | | | | | |
| Specific accommodations: (as specified in IEPs).  All periods:  Students with 90+ averages and demonstration of excellent work habits and motivation have the option of being in a “blended” segment of this class. All presentations, practice problems, etc. are on the web site. They may go to the media center or computer lab to work on the course. Students may also stay in class when they need additional support. This enables the instructor to work more closely with the other students and enables the “blended” students to be more challenged than they would be in the regular classroom. Current students taking the option: | | | | | | |
| **ASSESSMENT/EVALUATION** | | | | | | |
| * Observation, questioning of students while they are working * Completion of guided practice activity * Homework quizzes | | | | | | |
| **CLOSURE** | | | | | | |
| * Review day’s concepts and vocabulary * Remind students to review their unit notes | | | | | | |