| Grade: $\quad 8$ Math 1Benchmark \#: 8.2.3.A3 <br> Functions | Mastery Check 4 |  |
| :---: | :---: | :---: |
| State Language: <br> Translates between the numerical, tabular, graphical, and symbolic representations of linear relationships with integer coefficients constants. | Student Friendly Language: <br> Solves functions using graphs, tables, equations. |  |
| Concept (Students will know): <br> - And understand what a function is. (The definition) <br> - Know that functions can be represented in a number of ways. <br> - How to read tables and interpret them, translating them into other graphical representations, such as graphs, equations, ordered pairs, and the written word. <br> - Know how to translate and interpret an equation into a table, graph and other graphical representations. <br> - How to translate the written word into graphical representations, such as graphs, tables, ordered pairs, and equations. <br> - Know that all representations of a function show the same information. <br> - Differentiate between all types of graphical representations. <br> - Make connections between information in a function. | Skills (Students will do): <br> - Solve functions by substituting the information into a graphical representation, including graphs, table, and equations. <br> - Read and interpret a real-world problem and translate it into a graph, table, equation, or ordered pair. <br> - Translate an equation, words, table, graph, or ordered pairs into other types of graphical representations. <br> - Show the relationships between all the representations of the functions. <br> - Make connections and solve nonroutine problems of functions. | DOK Level: |

## Big Ideas:

The students Understand that a real-world problem can be organized into a function, a relationship between two pieces of information, using different representations. All graphical representations of the same function will show that same information.

## Essential Questions:

- What is a function?
- What are all the graphical representations of a function?
- How do you translate information into all of the graphical representations of a function?
- How you differentiate between the graphical representations of the function?


## Core Materials

Glencoe Pre-Algebra test book

## Supplemental Materials:

Resource workbooks from the text.
Teacher-generated projects
Study Island
Other Technology

## Teaching Strategies:

The students could take notes
Guided practice
Scaffolding

## Mastery Check Items:

