13 Topic: Relations & Functions Copied from: All Algebra 2, Copied on: 02/28/22

Mathematics
Algebra 2
Marking Period 3
2-3weeks
Published

Standards

MA.F-IF.A.1	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x . The graph of f is the graph of the equation $y = f(x)$.
MA.F-IF.A.2	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
MA.F-IF.B.4	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
MA.F-IF.B.5	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

Enduring Understandings

1. Mathematics is a language consisting of symbols and rules.

- 2. The same mathematical ideas can be represented concretely or symbolically.
- 3. There can be different strategies to solve a problem, but some are more effective and efficient than others.

Essential Questions

How will the student tell if a relation is a function? How will the student find the domain and range? How will the student perform operations with functions? How will the student find the inverse of a function? How will the student find the zeros and domains of rational functions? How will students graph functions and their inverses?

Knowledge and Skills

Understand Domain **Understand Range Understand Relation Understand Function** Understand Inverse Find the Value of a function FInd the Relation/Function Composition Understand Roster Definition of relation/function Map a relation/function Understand F(x) definition of a function Determine the Domain of a Relation or Function Determine the Range of a Relation or Function Determine if a relation is a Function Find the Inverse relation/function Evaluate a relation/function **Graph Functions**

Transfer Goals

Using mathematical reasoning and strategic thinking can allow for practical solutions ot many problems.

Often unique vocabulary and implementation methods are needed to solve problems.

- 1. McDougal/Littell Algebra & Trigonometry Structure & Method Book 2
- 2. Aufmann/Barker/Lockwood Intermediate Algebra with Applications Sixth Edition
- 3. Houghton/Mifflin/Harcourt On Core Mathematics Algebra 2
- 4. Holt Algebra 2 with Trigonometry
- 5. Larson/Boswell Big Ideas Math: Algebra 2 Texas Edition
- 6. Khan Academy
- 7. PurpleMath
- 8. KutaSoftware
- 9. <u>CK-12</u>
- 10. Quizlet
- 11. Albert I/O
- 12. <u>Desmos</u>
- 13. Problem Attic