

Relations and Functions Worksheet

Name: _____

Grade & Section: _____

Date: _____



I. Multiple Choice (Write the letter of the correct answer.)

___ 1. Which of the following is **not** a function?

- A. $\{(1, 2), (2, 3), (3, 4)\}$
- B. $\{(a, 1), (b, 2), (c, 3)\}$
- C. $\{(5, 1), (5, 2), (5, 3)\}$
- D. $\{(0, 3), (2, 3), (4, 5)\}$

___ 2. The set of all first elements in a relation is called:

- A. Range
- B. Domain
- C. Output
- D. Codomain

___ 3. A function assigns _____ output(s) for each input.

- A. two
- B. many
- C. exactly one
- D. any number of

___ 4. What is the **range** of the relation $\{(2,4), (3,5), (4,6)\}$?

- A. $\{2, 3, 4\}$
- B. $\{4, 5, 6\}$
- C. $\{3, 4, 5\}$
- D. $\{2, 4, 6\}$

___ 5. What do you call the set of all second elements in a relation?

- A. Domain
- B. Input
- C. Output
- D. Co-input



II. Identification

Write the correct answer on the blank provided.

- ___ 1. A relation in which no x-value is repeated.
- ___ 2. A visual method to determine if a graph is a function.
- ___ 3. The set of ordered pairs.
- ___ 4. The value you input into a function.
- ___ 5. The result or output of a function.

III. Matching Type

Match **Column A** with the correct term in **Column B**. Write the letter of the answer.

Column A

1. Domain
2. Function
3. Range
4. Ordered Pair
5. Equation

Column B

- A. $y = 2x + 3$
- B. $\{1, 2, 3, 4\}$ (set of x-values)
- C. A rule that assigns exactly one output
- D. $\{5, 6, 7, 8\}$ (set of y-values)
- E. (x, y)

IV. Word Bank

Complete the sentences by choosing the correct word from the **Word Bank** below.

Word Bank:

domain range function relation mapping

1. A _____ is a set of ordered pairs.
2. The set of inputs is called the _____.
3. A _____ pairs each input with only one output.
4. A _____ diagram helps illustrate how elements of the domain relate to the range.
5. The set of all outputs is called the _____.