Worksheet 2: Domain and Range

Name: _____ Date: _____

Instructions

- Read each question carefully
- Choose the best answer
- Circle the letter of your choice
- Only one answer per question

1. What is the domain of a function?

A) All possible output values

B) All possible input values

C) The highest point on a graph

D) The y-intercept

2. What is the range of a function?

A) All possible input values

B) All possible output values

C) The x-intercept

D) The slope of the line

3. For the function f(x) = x + 3, what is the domain?

A) Only positive numbers

B) Only negative numbers

C) All real numbers

D) Only whole numbers

4. Which set represents the domain of {(1,4), (2,5), (3,6), (4,7)}?

A) {4, 5, 6, 7}

B) {1, 2, 3, 4}

C) {1, 2, 3, 4, 5, 6, 7}

D) {4, 6}

5. Which set represents the range of {(1,4), (2,5), (3,6), (4,7)}?

A) {1, 2, 3, 4}

B) {4, 5, 6, 7}

C) {1, 2, 3, 4, 5, 6, 7}

D) {1, 7}

6. A function shows the temperature throughout a day. What would be a reasonable domain?

A) $0 \leq x \leq 24$ (hours)

B) $-100 \leq x \leq 100$ (temperature)

C) All negative numbers

D) Only even numbers

7. For f(x) = 2x, if the domain is {1, 2, 3}, what is the range?

A) {1, 2, 3}

B) {2, 4, 6}

C) {3, 4, 5}

D) {0, 2, 4}

8. What is the domain of a function that shows the cost of buying x movie tickets?

A) All real numbers

B) Only negative numbers

C) Non-negative whole numbers

D) Only numbers between 0 and 1

9. If a function has domain {-2, 0, 2, 4} and rule f(x) = x + 1, what is the range?

A) {-2, 0, 2, 4}

B) {-1, 1, 3, 5}

C) {-3, -1, 1, 3}

D) {-1, 0, 1, 2}

10. In context, if f(t) represents a plant's height after t days, what does the domain represent?

A) All possible heights

B) All possible days

C) The tallest the plant can grow

D) The age of the plant