

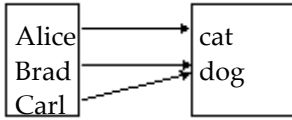
# Relations and Functions

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

**Determine whether the relation represents a function. If it is a function, state the domain and range.**

1)

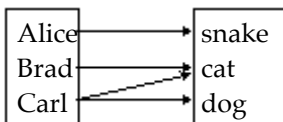
1) \_\_\_\_\_



- A) function  
domain: {cat, dog}  
range: {Alice, Brad, Carl}
- B) function  
domain: {Alice, Brad, Carl}  
range: {cat, dog}
- C) not a function

2)

2) \_\_\_\_\_



- A) function  
domain: {Alice, Brad, Carl}  
range: {snake, cat, dog}
- B) function  
domain: {snake, cat, dog}  
range: {Alice, Brad, Carl}
- C) not a function

3)  $\{(-3, -6), (0, 5), (5, -3), (6, -1)\}$

3) \_\_\_\_\_

- A) function  
domain:  $\{-6, 5, -3, -1\}$   
range:  $\{-3, 0, 5, 6\}$
- B) function  
domain:  $\{-3, 0, 5, 6\}$   
range:  $\{-6, 5, -3, -1\}$
- C) not a function

4)  $\{(1, -4), (-3, -3), (-3, 0), (6, 3), (22, 5)\}$

4) \_\_\_\_\_

- A) function  
domain:  $\{-4, -3, 0, 3, 5\}$   
range:  $\{1, 6, -3, 22\}$
- B) function  
domain:  $\{1, 6, -3, 22\}$   
range:  $\{-4, -3, 0, 3, 5\}$
- C) not a function

**Determine whether the equation defines y as a function of x.**

5)  $x + 6y = 3$

5) \_\_\_\_\_

- A) function
- B) not a function

Determine whether the equation defines y as a function of x.

6)  $x^2 + y^2 = 36$

A) y is a function of x

B) y is not a function of x

6) \_\_\_\_\_

7)  $x + y^3 = 64$

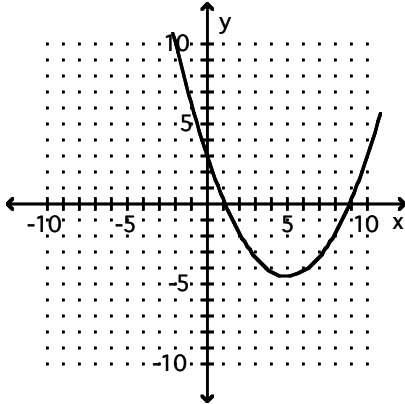
A) y is a function of x

B) y is not a function of x

7) \_\_\_\_\_

Decide whether the relation defines a function.

8)

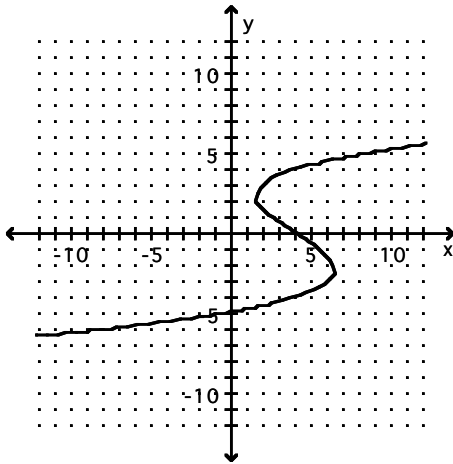


A) Not a function

B) Function

8) \_\_\_\_\_

9)



A) Function

B) Not a function

9) \_\_\_\_\_

10) Student Test Score

Name	Test Score
Bob L.	79
Susan H.	83
Jim H.	79
Bruce B.	96

A) Function

B) Not a function

10) \_\_\_\_\_

Answers:

1) B 2) C 3) B 4) C 5) A 6) B 7) A 8) B 9) B 10) A

## Answer Key

Testname: RELATIONS AND FUNCTIONS

- 1) B
- 2) C
- 3) B
- 4) C
- 5) A
- 6) B
- 7) A
- 8) B
- 9) B
- 10) A