## **Practice Function Identification**

Determine if the following tables, graphs, or equations are functions. Explain your reasoning.

1.

X	-3	-1	0	2	4
у	9	1	0	4	16

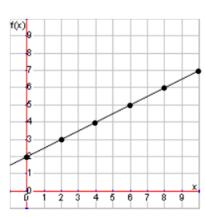
2.

X	3	3	4	4
у	9	-9	16	-16

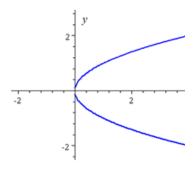
3. y = 4x+2

4.  $y^2 = x$ 

5.



6.



7. Input: Hamza's age (on his birthday)

Output: Hamza's height

8. Input: Hamza's height
Output: Hamza's age (on his birthday)

## **Practice Function Identification ANSWERS**

Determine if the following tables, graphs, or equations are functions. Explain your reasoning.

1. Yes, one output for every input

X	-3	-1	0	2	4
У	9	1	0	4	16

2. No, two outputs for an input. For example, input 3 could be either 9 or -9.

X	3	3	4	4
у	9	-9	16	-16

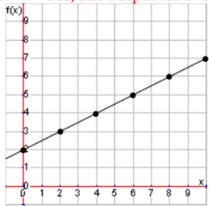
3.  $y^2 = x$ 

No, there will be two outputs for a single input. For example, input 4 has outputs 2 or -2.

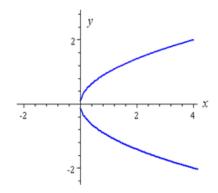
4. y = 4x+2

Yes, one output for every input.

5. Yes, one output for every input



6. No. Input 4 has an output of 2 and -2



Yes. On Arjun's 10<sup>th</sup> birthday, you know his height.

7. Input: Hamza's age (on his birthday)
Output: Hamza's height

No. Arjun may be 5'10" on several birthdays.

8. Input: Hamza's height
Output: Hamza's age (on his birthday)