Determine if the following tables, graphs, or equations are functions. Explain your reasoning.
1.

| x | -3 | -1 | 0 | 2 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| y | 9 | 1 | 0 | 4 | 16 |

3. $y=4 x+2$
4. 


2.

| $x$ | 3 | 3 | 4 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $y$ | 9 | -9 | 16 | -16 |

4. $y^{2}=x$
5. 


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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| y | 9 | 1 | 0 | 4 | 16 |

3. $y^{2}=x$

No, there will be two outputs for a single input. For example, input 4 has outputs 2 or -2 .
5. Yes, one output for every input


Yes. On Arjun's $10^{\text {th }}$ birthday, you know his height.
7. Input: Hamza's age (on his birthday) Output: Hamza's height
2. No, two outputs for an input. For example, input 3 could be either 9 or -9 .

| $x$ | 3 | 3 | 4 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $y$ | 9 | -9 | 16 | -16 |

4. $y=4 x+2$

Yes, one output for every input.
6. No. Input 4 has an output of 2 and -2


No. Arjun may be 5'10" on several birthdays.
8. Input: Hamza's height Output: Hamza's age (on his birthday)

