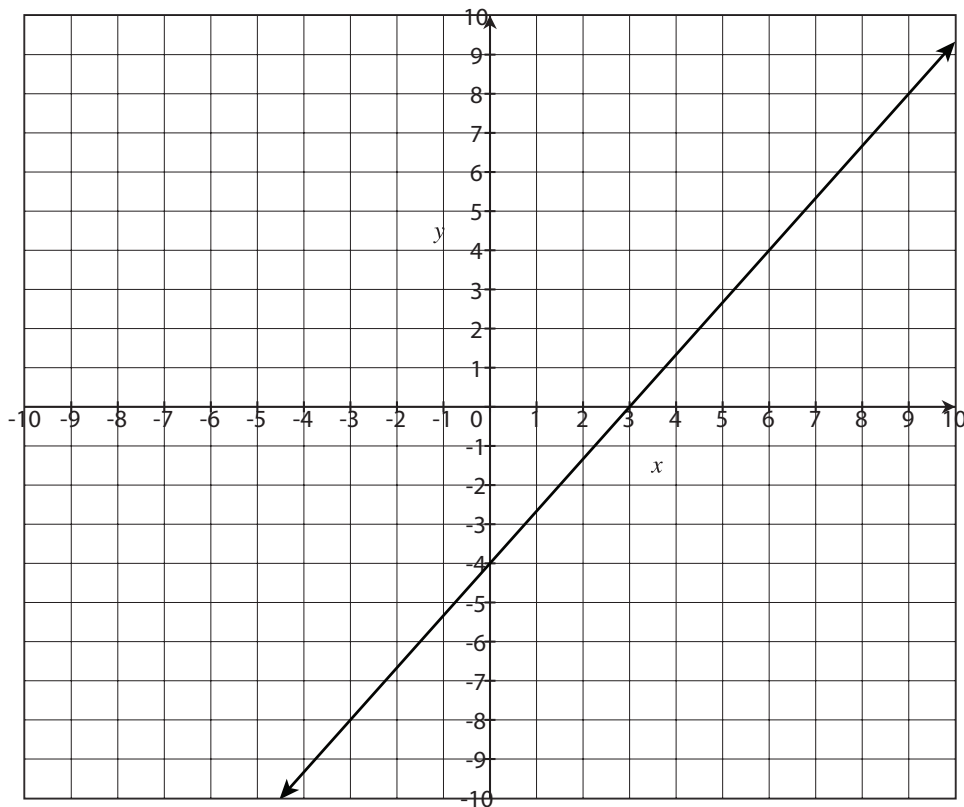Example 1:

Omar has decided to take yoga classes for one year. The yoga studio costs $10 to join and then each yoga class is $5. Omar's fees can be represented by the function $f(x) = 5x + 10$. What are the domain and range of the function?

Example 2:

What are the domain and range of the function graphed below?

Practice 3.1.3: Domain and Range

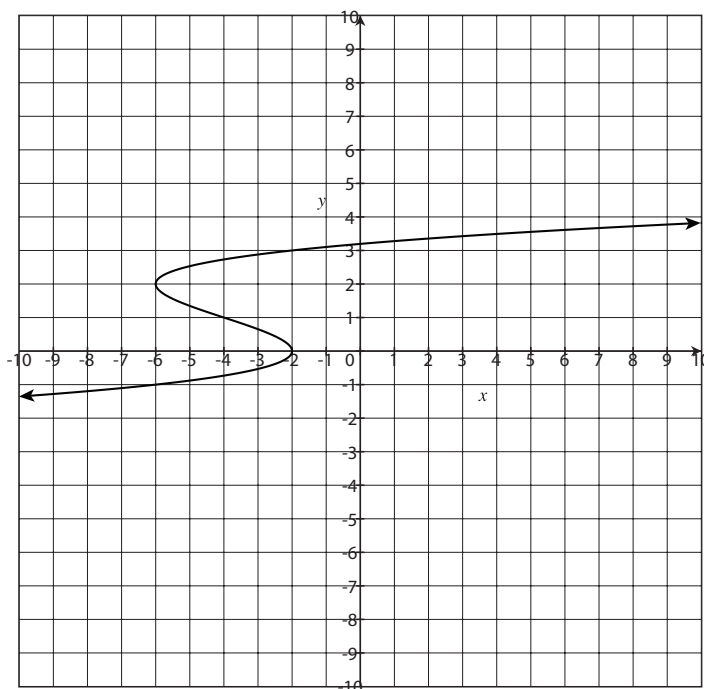Use what you know about functions, domain, and range to answer each question.

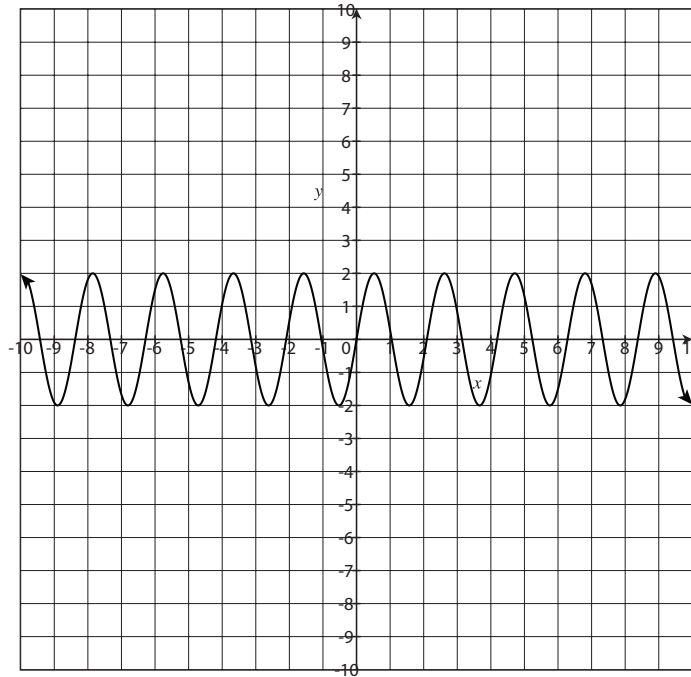1. Could the table below represent a function? Why or why not?

x	y
1	7
2	6
3	5
4	4
5	3
6	2

2. Could the table below represent a function? Why or why not?

x	y
0	1
2	3
4	5
6	7
8	9
10	1

3. Could the graph below be a function? Why or why not?
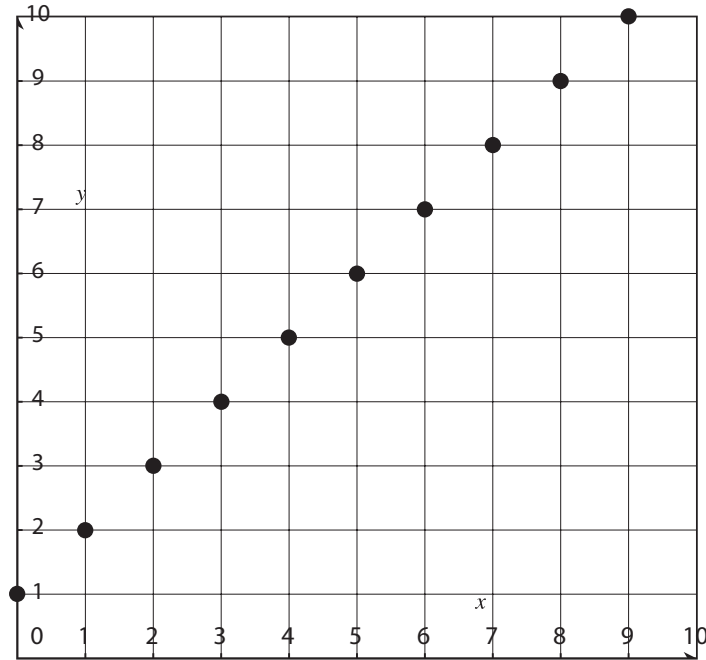
4. Could the graph below be a function? Why or why not?

5. Given the following set of points, is there a relation? If so, is the relation a function? Why or why not?

{(2, 4), (3, 6), (4, 8), (5, 10), (6, 12), (7, 14)}

6. Given the following set of points, is there a relation? If so, is the relation a function? Why or why not?

{(2, 2), (3, 3), (4, 4), (5, 5), (5, 6), (7, 7)}

7. What are the domain and range of the function graphed below?

9. A candle burns at a rate of 1 inch per hour. The original height of the candle is 12 inches. The function of the candle burning can be represented by $f(x) = -x + 12$. Draw a graph of the function. What are the domain and range?

10. The distance a trucker travels on the highway at 65 mph can be modeled by the function $f(x) = 65x$, where x is the time in hours. What are the domain and range of the function?