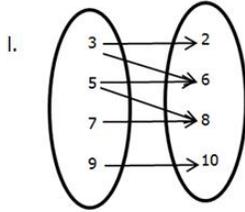
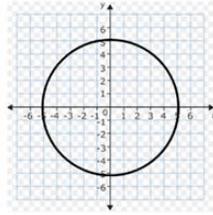


Possible Solutions

Which representation does **not** show y as a function of x ?



II.



III.

x	1	3	5	7
y	-6	-18	-30	-42

IV. $\{(-2, 3), (-1, 4), (0, 4), (3, 2)\}$

- a) I and II
- b) I, II and III
- c) I and IV
- d) All of the above are functions

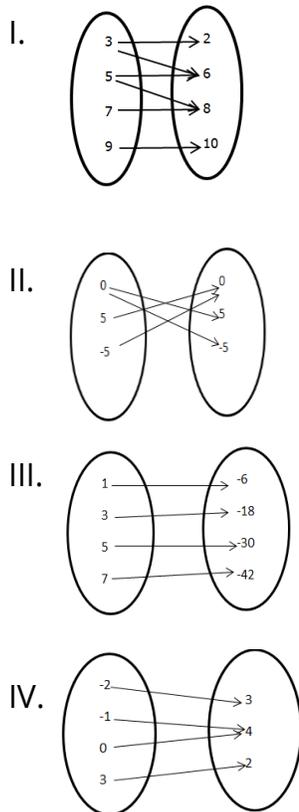
Possible Solution 1

- In a function, every x value can only be matched with one y value.
 - In the mapping I, both 3 and 5 are mapped with multiple y values, so I is not a function.
 - In the graph II, there are many points where x has more than one y value, so II is not a function.
 - In the table for III, every x value has a unique y value, so III is a function.
 - In the list of ordered pairs for IV, all of the x values have unique y values, so IV is a function.

- Therefore, I and II do not represent functions this makes a) the correct choice.

Possible Solution 2

- All of the relationships in the answer choices can be turned into mappings. If more than one arrow is drawn from the first circle to the second circle then the relationship is not a function.



Possible Solution 3

- To determine if a table is a function, look at the x values. If the x values are all unique numbers, then it represents a function.

- For this problem, make a table for all the choices to determine if it is a function.

I.

x	3	3	5	5	7	9
y	2	6	6	8	8	10

II.

x	0	5	0	-5
y	5	0	-5	0

III.

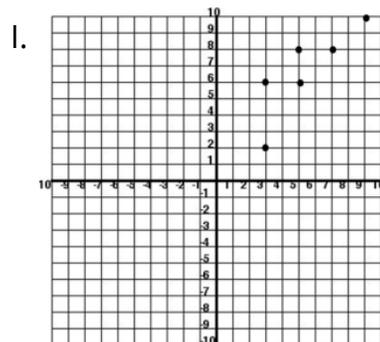
x	1	3	5	7
y	-6	-18	-30	-42

IV.

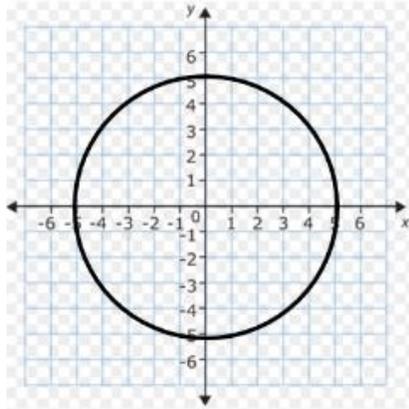
x	-2	-1	0	3
y	3	4	4	2

Possible Solution 4

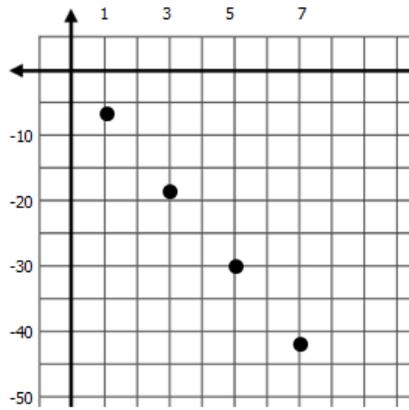
- Create a graph for each representation and apply the vertical line test.
- If you draw a vertical line and it intersects more than one point the relationship is not a function.



II.



III.



IV.

