

8.5G Identify Functions Using Sets of Ordered Pairs, Tables, Mappings,  
and Graphs

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**1** Which set of ordered pairs does show  $y$  as a function of  $x$ ?

**A**  $\{(-1, 2), (0, 3), (1, 4), (2, 5), (3, 6)\}$

**B**  $\{(1, 2), (1, 3), (1, 4), (1, 5), (1, 6)\}$

**C**  $\{(0, 1), (0, 2), (0, 3), (0, 4), (0, 5)\}$

**D**  $\{(-2, 2), (-1, 2), (0, 2), (-1, 2), (-2, 2)\}$

**2** The set of ordered pairs shows a relationship between  $x$  and  $y$ .

$$\{(-3, 2), (-2, 2), (2, -3), (3, -2)\}$$

Which statement is true for the set of ordered pairs?

- F**  $y$  is not a function of  $x$ , since there are more  $x$ -values than different corresponding  $y$ -values.
- G**  $y$  is a function of  $x$ , since the  $y$ -values do correspond to exactly one  $x$ -value.
- H**  $y$  is not a function of  $x$ , since the  $x$ -values do not correspond to exactly one  $y$ -value.
- J**  $y$  is a function of  $x$ , since the  $x$ -values do correspond to exactly one  $y$ -value.

3 Which table represents  $y$  as a function of  $x$ ?

**A**

$x$	$y$
-2	5
-1	4
0	1
1	2
2	1
3	0

**B**

$x$	$y$
-3	6
-1	4
0	3
1	3
3	4
3	6

**C**

$x$	$y$
-5	5
-1	4
0	3
-1	2
-5	1
-7	0

**D**

$x$	$y$
-4	7
-3	5
-2	3
-1	1
0	0
-1	-1

4 Which table does NOT represent  $y$  as a function of  $x$ ?

**F**

$x$	3	-1	-5
$y$	3	-1	-5

**G**

$x$	1	-4	-6
$y$	-2	3	-2

**H**

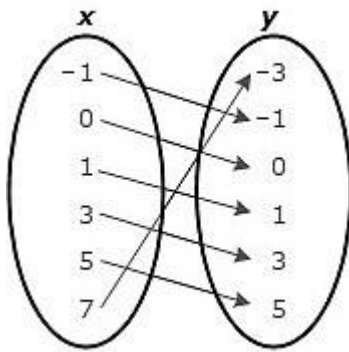
$x$	-2	3	-2
$y$	1	-4	-6

**J**

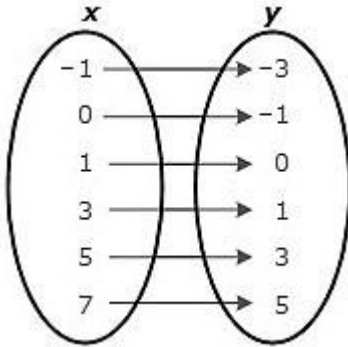
$x$	5	-5	-6
$y$	8	1	0

5 Which mapping does NOT represent  $y$  as a function of  $x$ ?

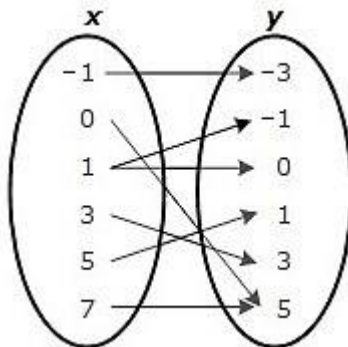
**A**



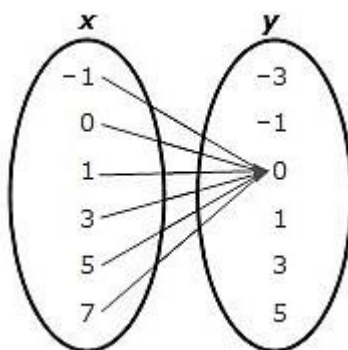
**B**



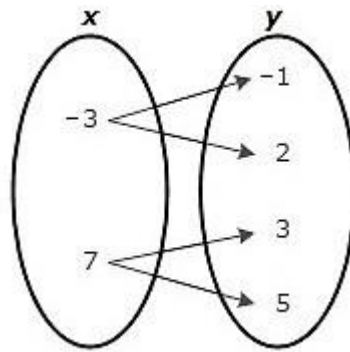
**C**



**D**



- 6 The mapping shows a relationship between  $x$  and  $y$ .



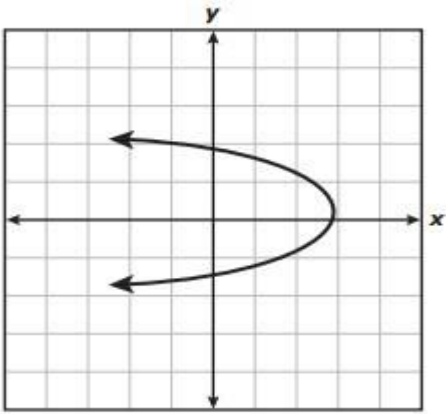
Which statement is true of the mapping?

- F**  $y$  is not a function of  $x$ , since the  $y$ -value  $3$  corresponds to two different  $x$ -values.
- G**  $y$  is a function of  $x$ , since the  $y$ -values do correspond to exactly one  $x$ -value.
- H**  $y$  is not a function of  $x$ , since the  $x$ -values do not correspond to exactly one  $y$ -value.
- J**  $y$  is a function of  $x$ , since the  $x$ -values do correspond to exactly one  $y$ -value.

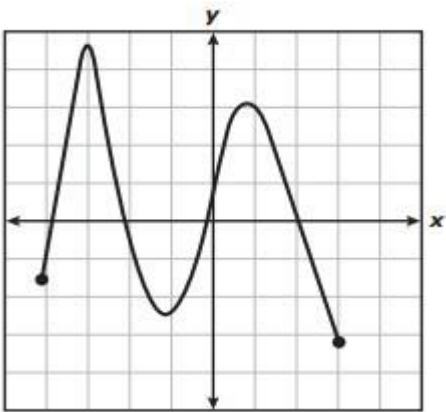


7 Which graph represents  $y$  as a function of  $x$ ?

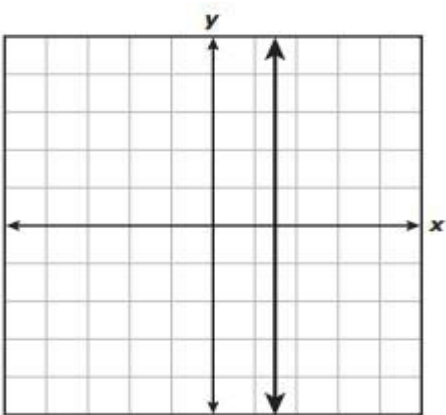
A



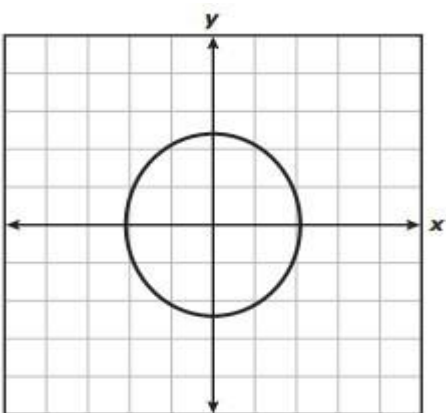
B



C

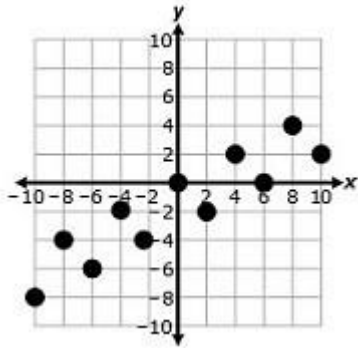


D

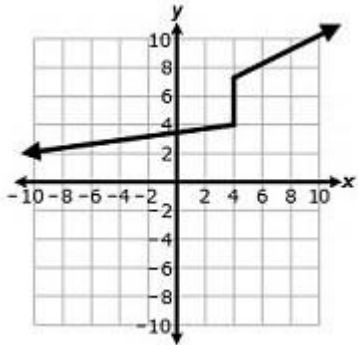


8 Which graph represents  $y$  as a function of  $x$ ?

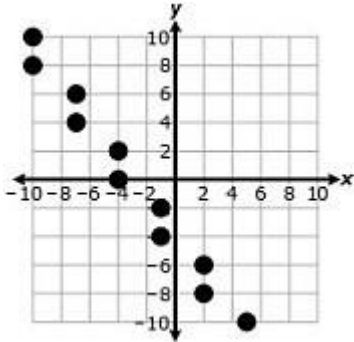
F



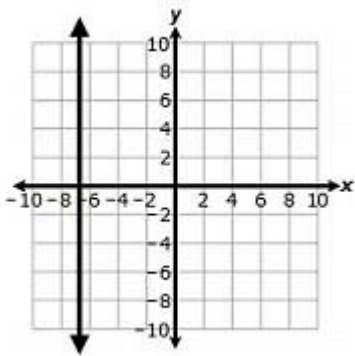
G



H

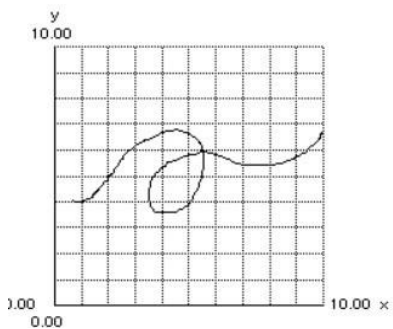


J

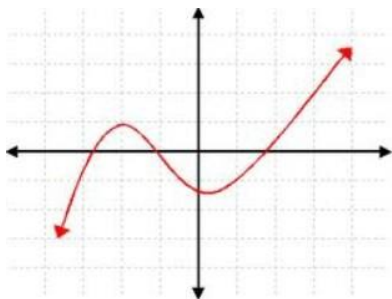


9 Which of the following represents a function?

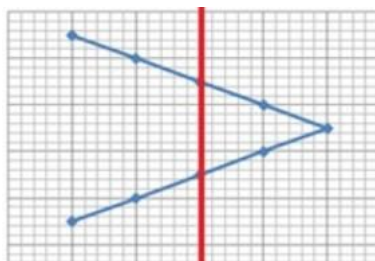
A



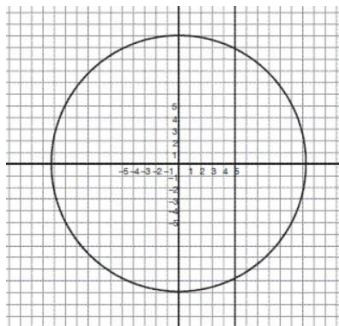
B



C



D



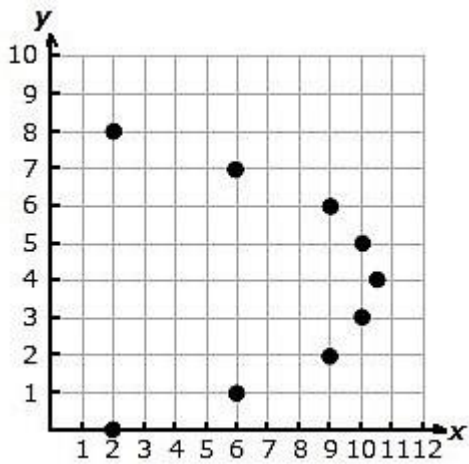
10 Which representation shows  $y$  as a function of  $x$ ?

F  $\{(3, 8), (4, 9), (5, 10), (4, 11), (3, 12)\}$

G

$x$	$y$
3	4
5	6
11	8
14	6
22	3

H



J

