Name: Key Date: _____

Functions Do Now

Multiple Choice

Identify the choice that best completes the statement or answers the question.

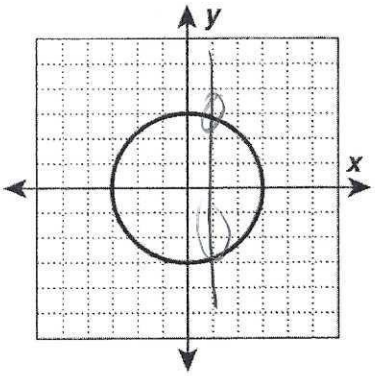
1. Which set of ordered pairs represents a function?

   a. (2, 5), (1, 6), (0, 5), (1, 10)
   b. (0, 0), (1, 1), (2, 0), (3, 3)
   c. (2, 1), (3, 1), (5, 1), (5, 4)
   d. (5, 4), (4, 5), (1, 2), (1, 4)

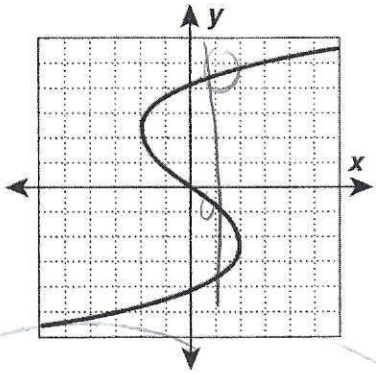
→ x's Don't repeat, every x can only have 1 y value

2. Which graph shows a function?

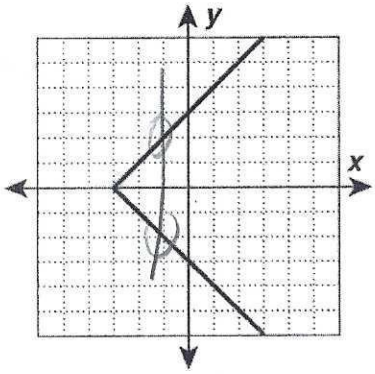
a.



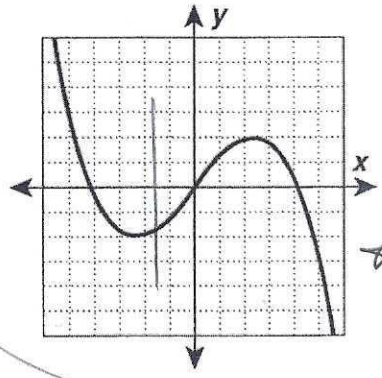
c.



b.



d.



only goes through once

* passes the vertical line test (only goes through 1 time)

3. Which set of points represents a function? → x-values do not repeat

a. (4,2), (4,−2), (2,5), (2,−5)
b. (−3,9), (−2,4), (0,0), (−2,4)
c. (−3,7), (7,3), (−3,4), (−7,−3)
d. (3,0), (0,6), (1,5), (0,0)

Same point! so it is a function

4. Which of these functions is *not* a linear function? → 1st power

a. $f(x) = x$
b. $f(x) = 3^x$
c. $f(x) = 3x$
d. $f(x) = 3x - 2$

5. Determine if the relation represents a function.

x	y
0	−5
1	−1
2	3
3	6

a. The relation is a function.
b. The relation is not a function.

x's don't repeat. Every element of the Domain corresponds to one & only one element of the range

6. Which of these tables shows direct variation?

a.

x	−1	0	1	2
y	18	21	24	28

b.

x	−1	0	1	2
y	−3	0	3	6

c.

x	−1	0	1	2
y	1	3	6	10

d.

x	−1	0	1	2
y	−2	−1	1	2

- linear
- constant rate of change
- goes through (0,0)

$+ \frac{y}{x}$

$\frac{-3}{-1} = 3$

$\frac{3}{1} = 3$

$\frac{6}{2} = 3$

} constant