

Sec 1H Unit 5 Day 5 – Function Notation and Graphs Classwork

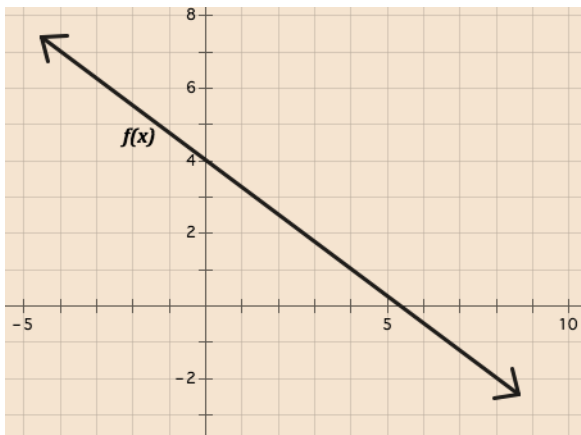
1. If  $h(x) = \frac{3}{2}x - 5$ , find the following values:

- a.  $h(4)$       b.  $h(-2)$       c.  $h(0)$

d. What value of  $x$  would make the function equal  $-2$ ?

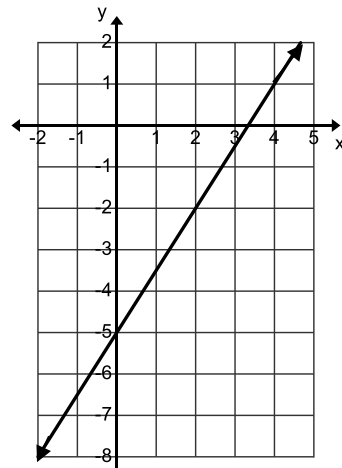
Use the graph of each function provided to find the values indicated.

2.



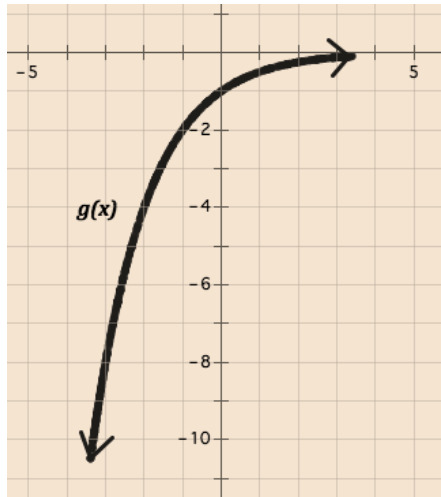
- a.  $f(4)$       b.  $f(-4)$   
 c.  $f(x) = 4$       d.  $f(x) = 5$

4.



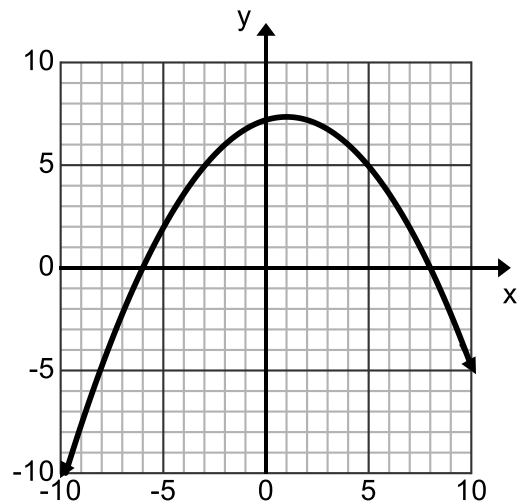
- a.  $h(x) = 1$       b.  $h(-2)$   
 c.  $h(0)$       d.  $h(x) = -2$

3.



- a.  $g(-1)$       b.  $g(-3)$   
 c.  $g(x) = -4$       d.  $g(x) = -1$

5.



- a.  $r(x) = 0$       b.  $r(x) = 2$   
 c.  $r(-2)$       d.  $r(8) =$

6. DO NOT SOLVE THIS PROBLEM. USE NOTATION TO MODEL THE SITUATION.

Fran collected data on the number of feet she could walk each second and wrote the following rule to model her walking rate:  $d(t) = 4t$

- A. What is Fran looking for if she writes  $d(12) = ?$
- B. In this situation what does  $d(t) = 100$  tell you?
- C. How can the function rule be used to indicate a time of 16 seconds was walked?
- D. How can the function rule be used to indicate that a distance of 200 feet was walked?

Use the table to answer #7 - 11

- 7. Find  $m(-1) =$              $r(-1) =$              $b(-1) =$
- 8. Find  $x$  if  $m(x) = 1$
- 9. Find  $x$  if  $r(x) = 12$
- 10. Find the  $x$ -intercept of  $b(x)$ .
- 11. Find the  $y$ -intercept of  $m(x)$

X	m(x)	r(x)	b(x)
-2	0.5	12	0
-1	1	12	-5
0	1.5	12	-10
1	2	12	-15

**For each context or representation determine whether it is discrete or continuous or could be modeled best in a discrete or continuous way and state why.**

- 12. Harrison picks a peck of peppers in his garden.
- 13. Susan has a savings plan where she places \$5 a week in her piggy bank.
- 14. Marshal tracks the number of hits he gets each baseball game and is recording his total number of hits for the season in a table.
- 15. Alex's bike computer records the miles he travels on a day trip to Utah Lake.
- 16. The distance the earth is from the sun during the year.

17.

Number of Gum Balls	Cost
5	1
10	2
15	3

18.

X	F(x) = x <sup>2</sup>
5	25
10	100
14	196
0.2	0.04