

Name _____ Date _____

Function Notation Homework

#1 – 12. Evaluate the following expressions given the functions below:

$$g(x) = -3x + 1$$

$$f(x) = x^2 + 7$$

$$h(x) = \frac{12}{x}$$

$$j(x) = 2x + 9$$

1. $g(10) =$

2. $f(3) =$

3. $h(-2) =$

4. $j(7) =$

5. $f(-2) + h(6)$

6. $2j(0.5) - 3g(0)$

7. $h(a)$

8. $g(b+c)$

9. $j(d-1)$

10. Find x if $g(x) = 16$

11. Find x if $h(x) = -2$

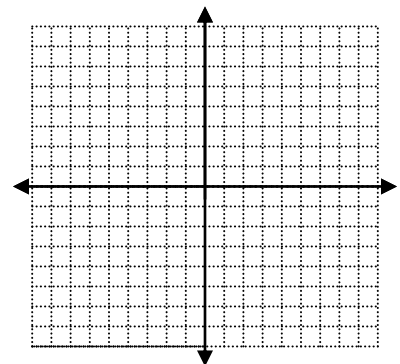
12. Find x if $f(x) = 23$

13. $g(h(4)) =$

14. $j \circ f(3) =$

15. Given $f(x) = 3 - 4x$. Fill in the table and then sketch a graph.

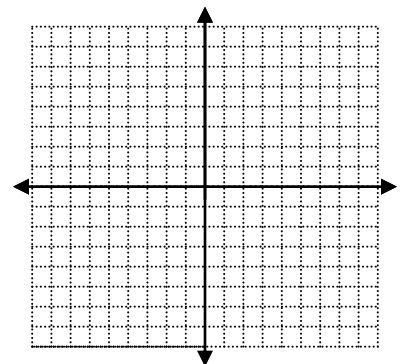
x	$f(x)$
-6	
-3	
0	
1	
	-5



Is $f(x)$ a function? Is it continuous or discrete?

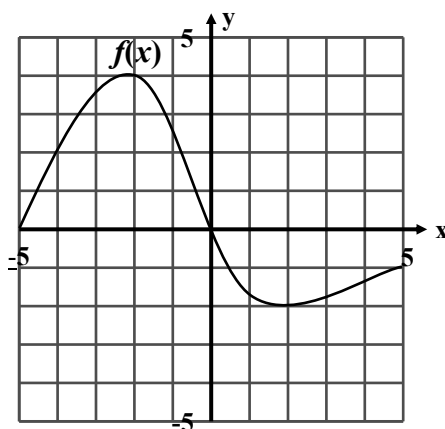
15. Given $g(x) = \sqrt{x+1}$. Fill in the table and then sketch a graph.

x	$f(x)$
3	
0	
-10	
2	
	6



Is $g(x)$ a function? Is it continuous or discrete?

#16 – 23. Given this graph of the function $h(x)$, find the following.



16. $h(-4) =$

17. $h(0) =$

18. $h(3) =$

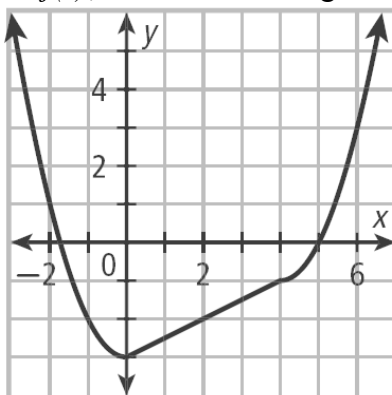
19. $h(-5) =$

21. x when $h(x) = 2$

22. x when $h(x) = 0$

23. What is the domain and range of $h(x)$? Is it a function? Is it continuous or discrete?

#24 – 30. Given this graph of the function $j(x)$, find the following.



24. $j(-2) =$

25. $j(0) =$

26. $j(3) =$

27. $j(5) =$

28. x when $j(x) = -3$

29. x when $j(x) = 0$

30. What is the domain and range of $j(x)$? Is it a function? Is it continuous or discrete?