Name: _____ Period: _____

Score: _____/_____ _____%

HW 3-2: Function Notation

Find each function value. Write your answers in function notation.

1. $f(7)$ if $f(x)=5x$

2. $f(9)$ if $f(x)=x+13$

3. $f(4)$ if $f(x)=3x-1$

Choose four values for *x* to make a function table for each function.

4. $f(x)=6x-4$

x	$6x-4$	$f(x)$
-2		
0		
3		

5. $f(x)=5-2x$

x	$5-2x$	$f(x)$
-3		
0		
1		

6. $f(x)=7+3x$

x	$7+3x$	$f(x)$
-1		
0		
4		

Find each function value.

7. $f\left(\frac{5}{6}\right)$ if $f(x)=2x+\frac{1}{3}$

8. $f\left(\frac{5}{8}\right)$ if $f(x)=4x-\frac{1}{4}$

9. Malinda is buying CDs that cost $12.99 each. There is a shipping charge of $4.95. Which function represents the total cost $c(m)$ of m CDs?

Ⓐ $c(m) = m(12.99 + 4.95)$ Ⓒ $c(m) = 12.99m + 4.95$

Ⓑ $c(m) = 4.95m + 12.99$ Ⓓ $c(m) = (12.99 - 4.95)m$

Find each function value.

10. $f(-7)$ if $f(x)=8x+15$

11. $f(9)$ if $f(x)=5x-16$

Choose four values for x to make a function table for each function. One value must be 0, one value must be a negative, and two other values of any type.

12. $f(x) = x - 9$

x	$x - 9$	$f(x)$

13. $f(x) = 7x$

x	$7x$	$f(x)$

14. $f(x) = 4x + 3$

x	$4x + 3$	$f(x)$

If $f(x) = 2x - 6$ and $g(x) = x - 2x^2$, find each value.

15. $f(2)$

16. $f\left(-\frac{1}{2}\right)$

17. $f(2.5)$

18. $g(-1)$

19. $g(3)$

20. $g\left(-\frac{1}{3}\right)$

Given $f(x) = 2x - 4$ and $g(x) = x^2 - 4x$, find each value.

21. $f(4)$

22. $g(2)$

23. $f(-5)$

24. $g(-3)$

25. $f\left(\frac{1}{4}\right)$

26. $g\left(\frac{1}{4}\right)$

27. $f(23)$

28. $g(16)$