

1. Evaluate $f(x) = 4x - 1$ given the inputs $\{-1, 0, 1, 2\}$

2. Evaluate $r(x) = 6x + 1$ given the inputs $\{-3, -1, 1, 3\}$.

3. Evaluate $f(x) = 2x^2 - 3$ given the inputs $\{-2, 0, 1, 2\}$.

4. Evaluate $g(x) = 3^x$ given the inputs $\{-3, 0, 2, 3\}$.

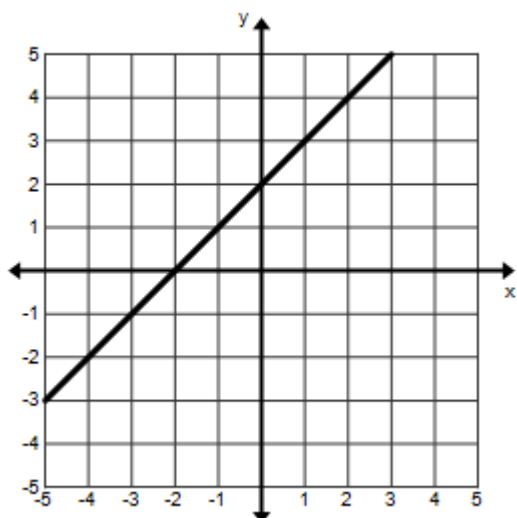
5. Given the table below, what is $f(1)$?

x	$f(x)$
-2	1
-1	4
0	0
1	-1

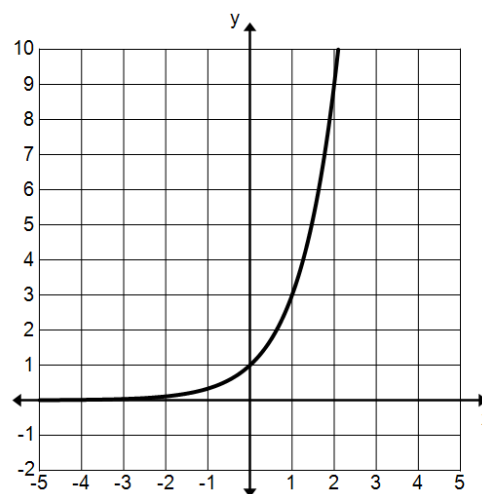
6. Given the table below, what is $f(-1)$?

x	$f(x)$
-2	0
-1	9
0	-1
1	23

7. Given the graph below, what is $f(-2)$?



8. Given the graph below, what is $f(1)$?



#9-14: Let $f(x) = x - 5$ and $g(x) = 3x + 4$. Perform the indicated operation.

9. $(f + g)(x)$

10. $(g + f)(x)$

11. $(f - g)(x)$

12. $(g - f)(x)$

13. $(f + f)(x)$

14. $(g - g)(x)$

#15-18: Let $f(x) = 2x + 3$, $g(x) = 3x$, and $h(x) = 12x$. Perform the indicated operation.

15. $(f \cdot g)(x)$

16. $(g \cdot f)(x)$

17. $(g \cdot g)(x)$

18. $(g \cdot h)(x)$

#19-22: Let $f(x) = 7x$ and $g(x) = x - 4$. Perform the indicated operation.

19. $4[f(x)]$

20. $g(x) + 4$

21. $5[f + g](x)$

22. $(f - g)(x) + 10$

23. $-2[(f \cdot g)(x)]$

24. $3[(g - f)(x)] + 7$

A new food truck is going to sell burritos at UVU. Each burrito is going to be sold for \$3. The owner buys \$350 of materials and knows that it will cost him \$1 to make each burrito.

25. What is the cost function for the food truck? (**DON'T FORGET** to use function notation.)

26. What is the revenue function? (**DON'T FORGET** to use function notation.)

27. What is the profit function for the food truck? (**DON'T FORGET** to use function notation.)

28. If he sells 100 burritos, how much money did he make? If you get a negative number, explain what it means in context of the problem.

29. How many burritos does he need to sell to break even?