

Functions and Equations



Real-World Link

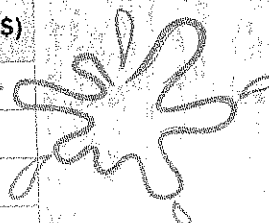
Babysitting The table shows the amount of money Carli earns based on the number of hours she babysits.

- Write a sentence that describes the relationship between the number of hours she babysits and her earnings.

- Does she earn the same amount each hour?

Explain.

Hours Babysitting	Earnings (\$)
1	6
2	12
3	18
4	24

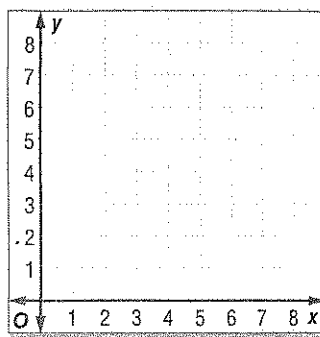


Guided Practice

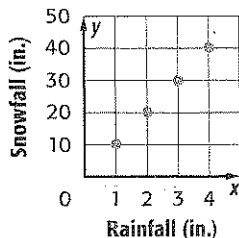
- Write an equation to represent the function shown in the table. (Example 1)

Input (x)	0	1	2	3	4
Output (y)	0	4	8	12	16

- Graph the function $y = x + 3$. (Example 2)



- The graph below shows the number of inches of rainfall x equivalent to inches of snow y . Make a function table for the input-output values. Write an equation from the graph that can be used to find the total inches of snow y equivalent to inches of rain x . (Examples 3 and 4)



Rain (x)	Snow (y)

Independent Practice

Write an equation to represent each function. (Example 1)

1.

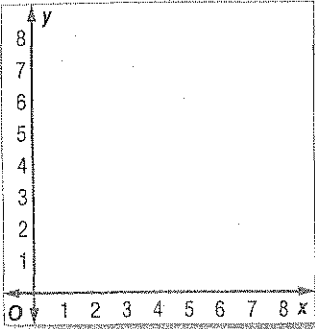
Input (x)	1	2	3	4	5
Output (y)	6	12	18	24	30

2.

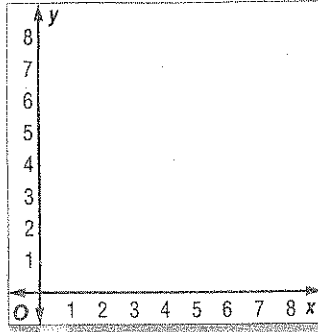
Input (x)	0	1	2	3	4
Output (y)	0	15	30	45	60

Graph each equation. (Example 2)

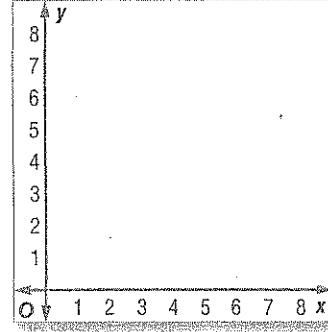
3. $y = x + 4$



4. $y = 2x + 0.5$

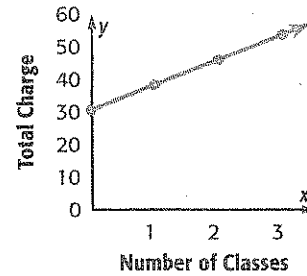


5. $y = 0.5x + 1$



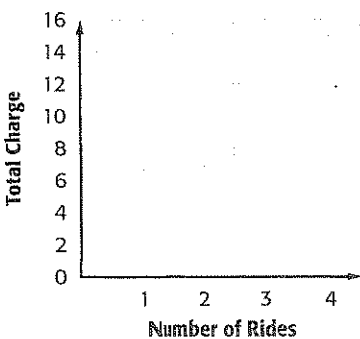
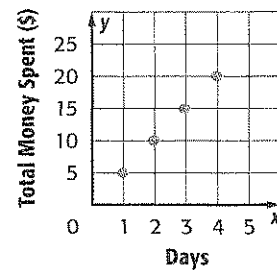
6. The graph shows the charges for a health club in a month. Make a function table for the input-output values. Write an equation that can be used to find the total charge y for the number of x classes. (Examples 3 and 4)

Input (x)				
Output (y)				



7. The graph shows the amount of money Pasha spent on lunch. Make a function table for the input-output values. Write an equation that can be used to find the money spent y for any number of days x . (Examples 3 and 4)

Input (x)				
Output (y)				



18. A fair charges an admission fee of \$8. Each ride is an additional \$2. The equation $t = 8 + 2r$ describes the total charge t for the number of rides r . Graph the function.