



# Function Representations

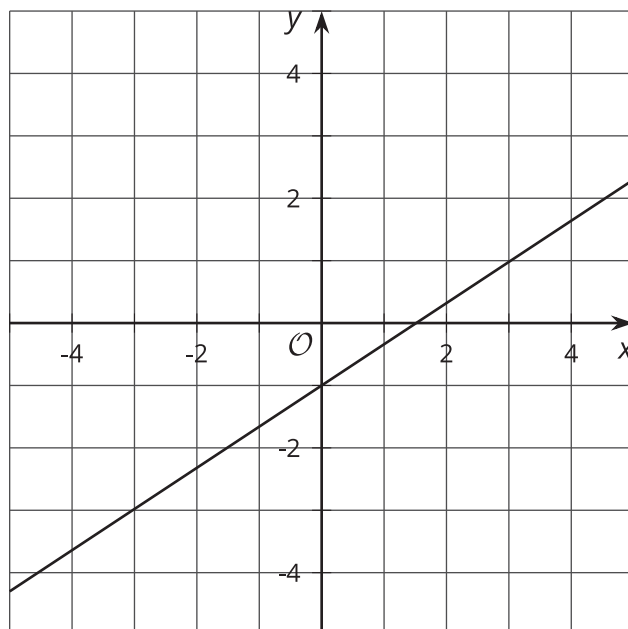
Let's examine different representations of functions.

## 5.1 Notice and Wonder: Representing Functions

What do you notice? What do you wonder?

$$f(x) = \frac{2}{3}x - 1$$

$x$	$y$
-1	$-\frac{5}{3}$
0	-1
1	$-\frac{1}{3}$
2	$\frac{1}{3}$
3	1



# 5.2

## A Seat at the Tables

Use the equations to complete the tables.

1.  $y = 3x - 2$

$x$	$y$
1	
3	
-2	

2.  $y = 5 - 2x$

$x$	$y$
0	
3	
5	

3.  $y = \frac{1}{2}x + 2$

$x$	$y$
-4	
3	
6	

4.  $y = 2x - 10$

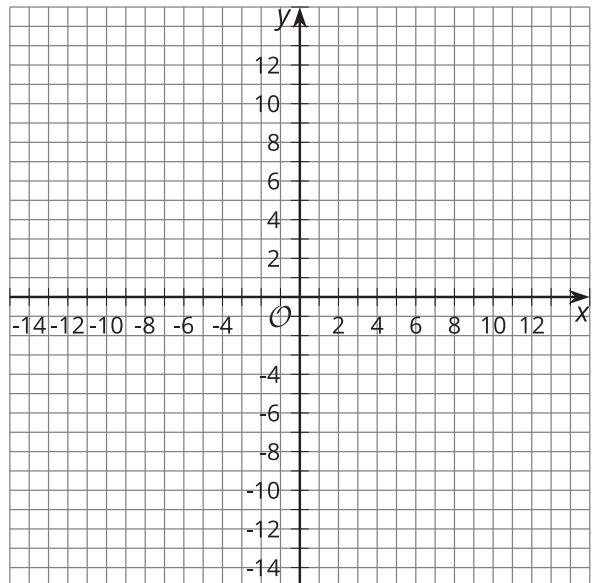
$x$	$y$
3	
7	
-8	

## 5.3 Function Finder

1. Use the values in the table to graph a possible function that would have the values in the table.

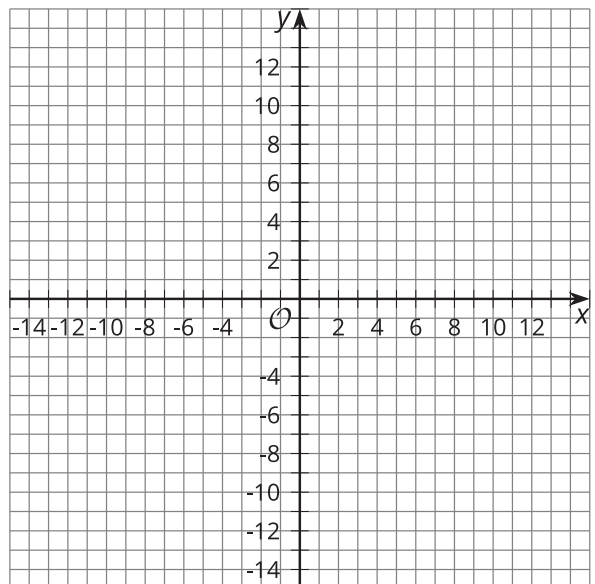
a.

$x$	$y$
1	3
2	5
3	7
5	11



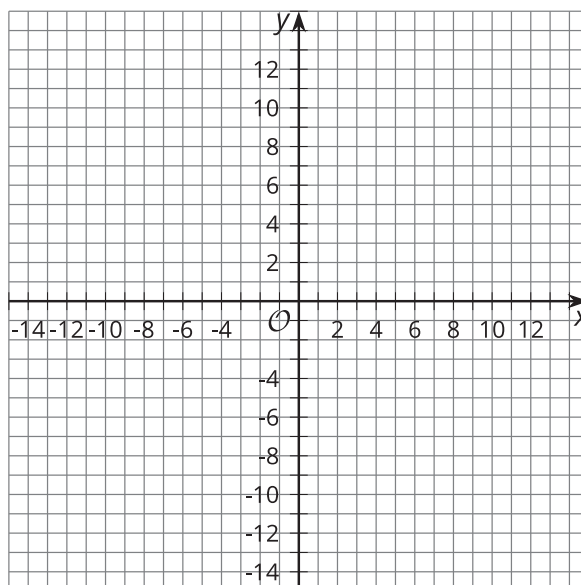
b.

$x$	$y$
-2	0
0	1
2	2
4	3



c.

$x$	$y$
-2	14
-1	12
1	8
2	6



- For each of the tables, write a linear equation (like  $y = ax + b$ ) so that the table can be created from the equation.
- Invent your own linear equation. Then, create a table or graph, including at least 4 points, to trade with your partner. After getting your partner's table or graph, guess the equation that your partner invented.