Unit 5, Lesson 5

Function Representations

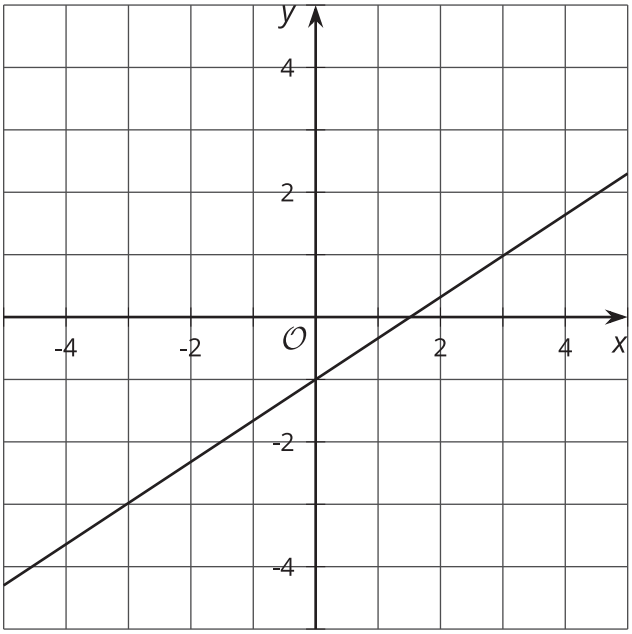
Let's examine different representations of functions.

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. $y = 2x - 10$

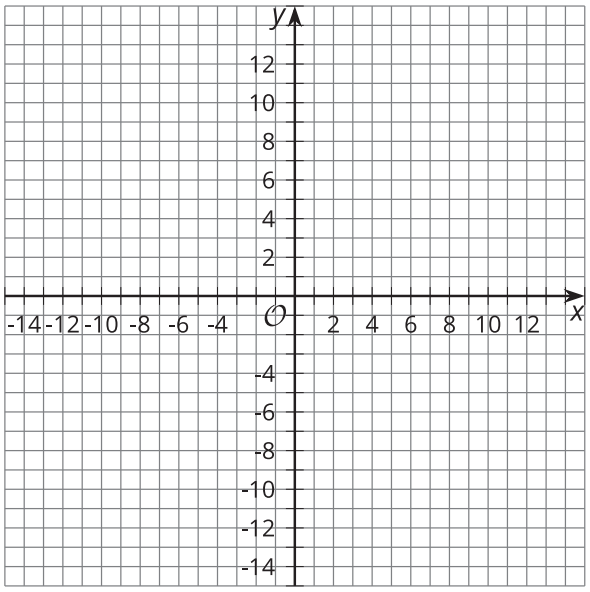
x	y
3	
7	
-8	

5.3 Function Finder

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

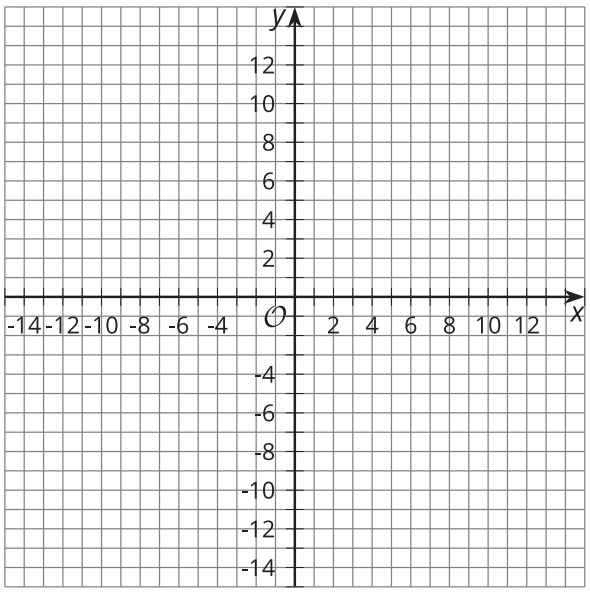
a.

x	y
1	3
2	5
3	7
5	11



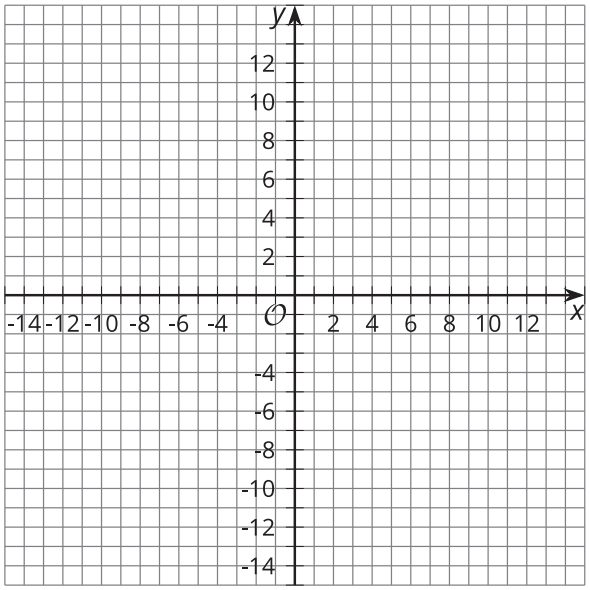
b.

x	y
-2	0
0	1
2	2
4	3



c.

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



2. For each of the tables, write a linear equation (like $y = ax + b$) so that the table can be created from the equation.
3. 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.