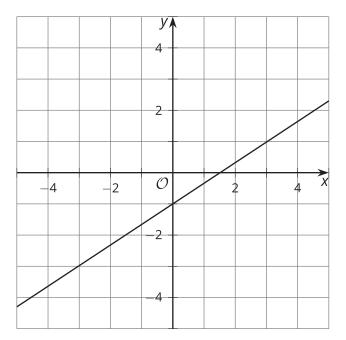
Unit 4 Lesson 5: Function Representations

1 Notice and Wonder: Representing Functions (Warm up) Student Task Statement

What do you notice? What do you wonder?

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



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

2 A Seat at the Tables

Student Task Statement

Use the equations to complete the tables.

1. y = 3x - 2

x	y
1	
3	
-2	

2. y = 5 - 2x

x	У
0	
3	
5	

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

x	у
-4	
3	
6	

x	y = 2x - 10
3	
7	
-8	

4.

3 Function Finder

Student Task Statement

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

a.

x	у
1	3
2	5
3	7
5	11

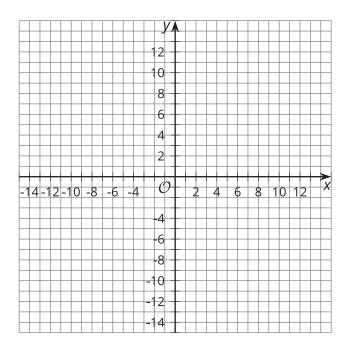
		<u> </u>			
		12			
		10 -			
		8			
		6 -			
		4			
		2			
		10		0 10 12	X
-14-12-1	0 -8 -6	-4 0	246	5 8 10 12	1 1
-14-12-1	10 -8 -6	-4 0	246	5 8 10 12	1 1
-14 -12 -1	10 -8 -6	-4 -4 -	246	5 8 10 12	1 1
-14 -12 -1	10 -8 -6	-4 -4 -6 -8	2 4 6	5 8 10 12	1 1
-14-12-1	10 -8 -6	-4 -4 -6 -8 -10	2 4 6	5 8 10 12	1 1
-14-12-1	10 -8 -6	-4 -4 -6 -8	2 4 6	5 8 10 12	

b.

					y y									
					12 -									
						_						-		_
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-14-1.	2 - 1 () -8	-6	-4	O		2 .	4	6	8	10) 1	2	X
-14-1	2-1() -8	-6	-4			2.	4	6	8	10) 1	2	
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-14-1.	2 -1() -8	-6	-4			2 /	4	6	8	10) 1	2	X
	2 -1(0 -8	-6	-4	-4		2	4	6	8	10) 1	2	
	2 -1() -8	-6	-4	-4		2 .		6	8	10) 1	2	
) -8	-6	-4	4 6 8		2 /	4	6	8			2	

c.

x	у
-2	14
-1	12
1	8
2	6



- 2. For each of the tables and graphs, 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 they invented.