AIS

Function Representations

Let's examine different representations of functions.

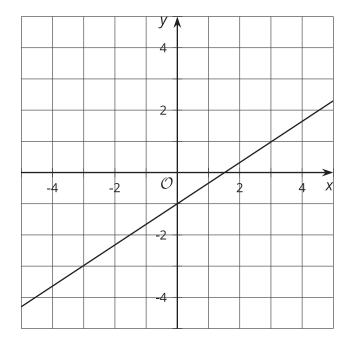


Notice and Wonder: Representing Functions

What do you notice? What do you wonder?

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

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



Use the equations to complete the tables.

1.
$$y = 3x - 2$$

2.
$$y = 5 - 2x$$

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

4.
$$y = 2x - 10$$

х	у
1	
3	
-2	

x	у
0	
3	
5	

х	у
-4	
3	
6	

x	у
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.

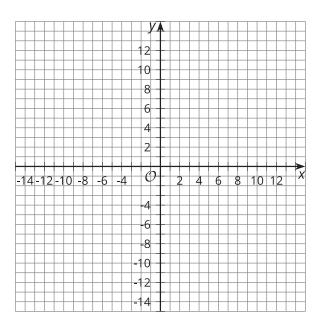
a.

х	у
1	3
2	5
3	7
5	11

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1/1	2 10		Ļ		0					10	12	\downarrow
-14-1	2-10) -8	-6	-4	0	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	0	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4		2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	<i>O</i> -4	2	4	6	8	10	12	X
-14-1	2-10	0 -8	-6	-4	-4	2	4	6	8	10	12	X
-14-1	2-10	0 -8	-6	-4	-4 -6	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4 -6	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4 -6 -8	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4 -6 -8	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4 -6 -8 -10	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4 -6 -8	2	4	6	8	10	12	X
-14-1	2-10) -8	-6	-4	-4 -6 -8 -10	2	4	6	8	10	12	X

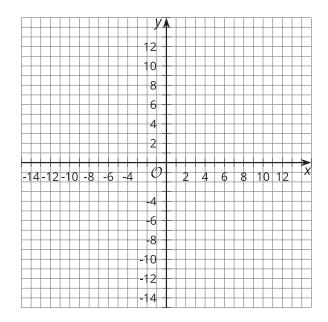
b.

х	у
-2	0
0	1
2	2
4	3



c.

x	у
-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.