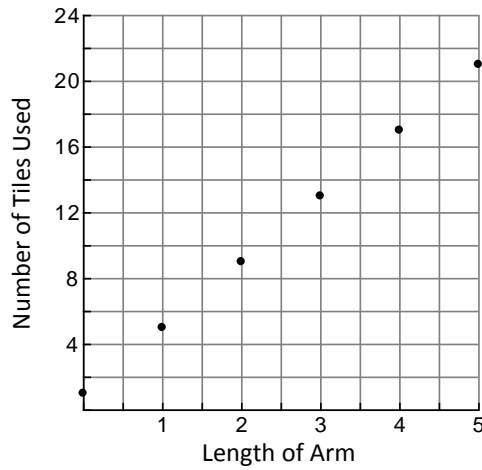


3.2.1 Relation Investigation - Functions

1. Using color tiles, you made X shapes.

Describe the data and the graph.

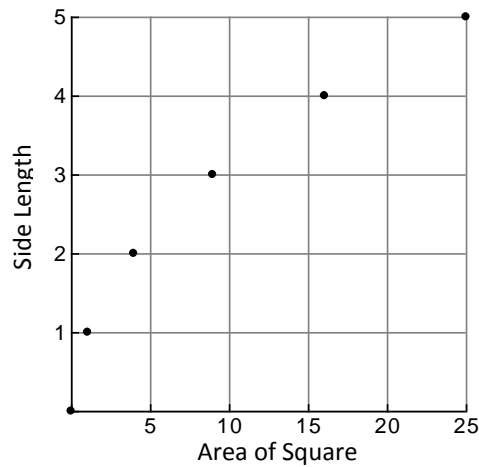
Length of Arm	Tiles Used
0	1
1	5
2	9
3	13
4	17
5	21



2. Using color tiles, you made squares.

Describe the data and the graph.

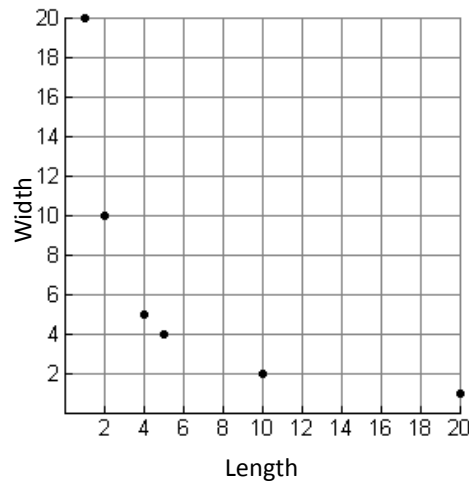
Area	Side Length
0	0
1	1
4	2
9	3
16	4
25	5



3. Using 20 color tiles you made rectangles.

Describe the data and the graph.

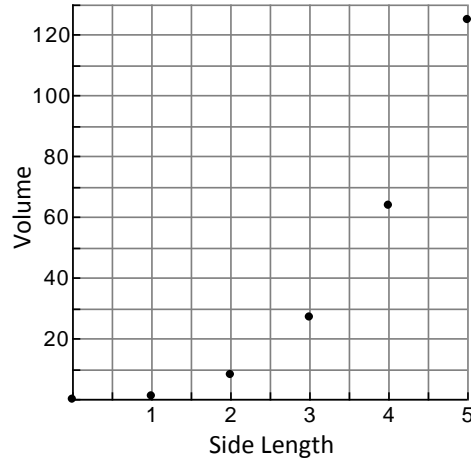
Length	Width
1	20
2	10
4	5
5	4
10	2
20	1



4. Using wooden blocks you made cubes.

Describe the data and the graph.

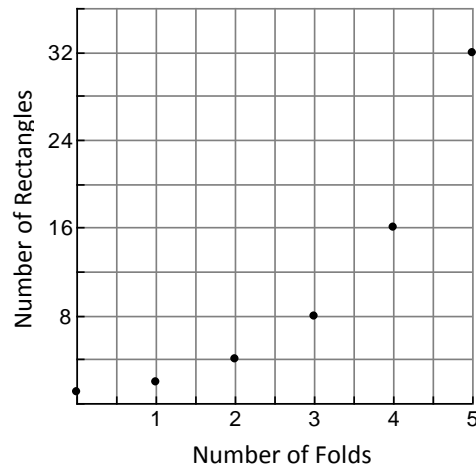
Side Length	Volume
0	0
1	1
2	8
3	27
4	64



5. Using a piece of paper you made folds.

Describe the data and the graph.

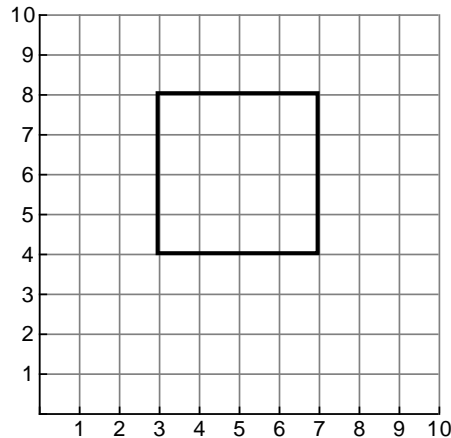
Folds	Rectangles
0	
1	
2	
3	
4	
5	



6. You drew a 4 x 4 square on the grid.

Describe the data and the graph.

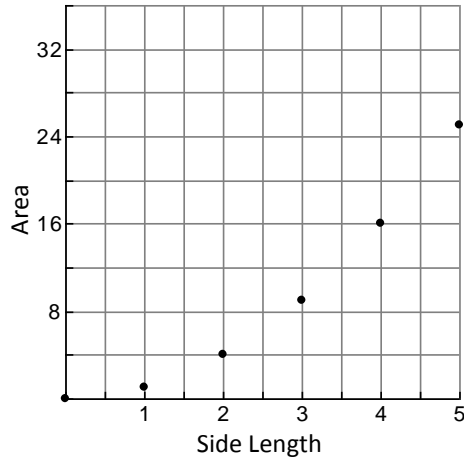
x-coord	y-coord
3	4
4	4
5	4
6	4
7	4
3	5
4	8
5	8



7. Using Geoboards you made squares.

Describe the data and the graph.

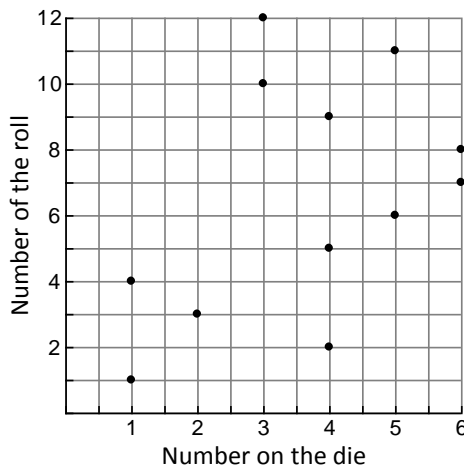
Side Length	Area
0	
1	
2	
3	
4	
5	



8. Rolling a die 12 times, you recorded the number of the roll.

Describe the data and the graph.

Number on the die	Number of the roll
1	4, 1
2	3
3	10, 12
4	2, 5, 9
5	6, 11
6	7, 8



To be a **function**, there can only be 1 answer to the question, “What is the output when the input is ___.”

9. Which of these relations aren't functions? _____

Why not? _____
