

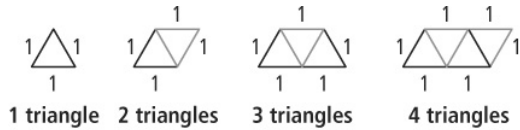
4-2

Practice

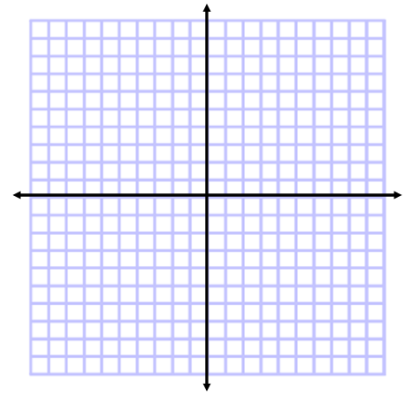
Patterns and Linear Functions

For each diagram, find the relationship between the number of shapes and the perimeter of the figure they form. Represent this relationship using a table, words, an equation, and a graph.

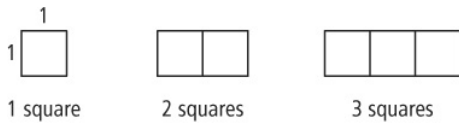
1.



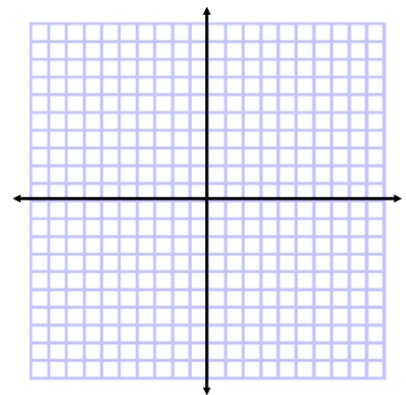
Triangles	1	2	3	4	5	6		n
Perimeter	3	4	5				12	



2.



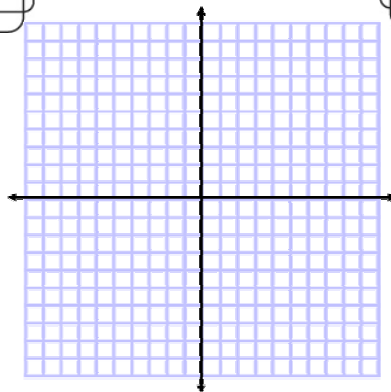
Squares	1	2	3	4	5	6		n
Perimeter	4	6	8				22	



For each table, determine whether the relationship is a function (every input has one output). Then represent the relationship using words, an equation, and a graph.

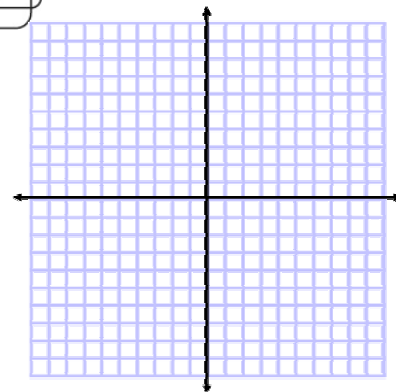
3.

x	y
0	1
1	3
2	5
3	7



4.

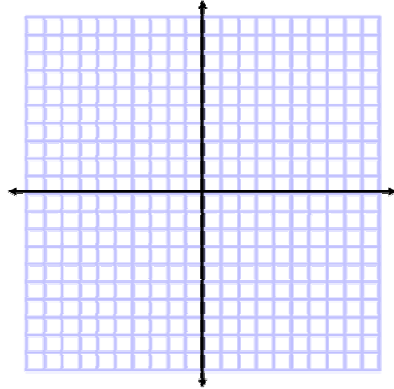
x	y
0	6
1	7
2	8
3	9



For each table, determine whether the relationship is a function. Then represent the relationship using words, an equation, and a graph.

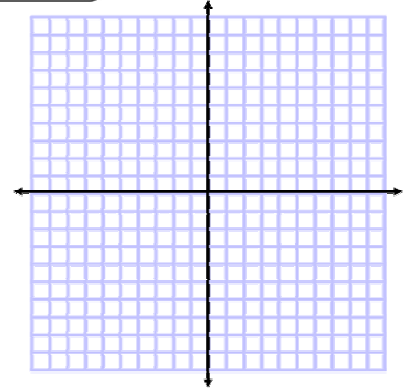
5. Distance Traveled

Time (h)	Distance (mi)
0	0
1	55
2	110
3	165

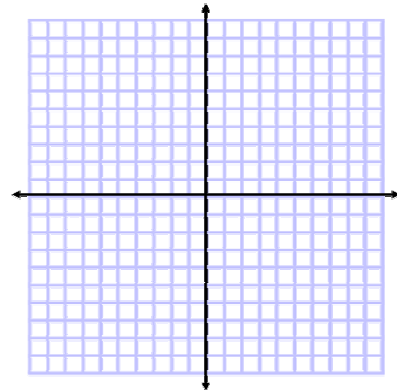


6. Calories Burned

Minutes (min)	Calories (C)
0	0
10	50
20	100
30	150



7. Reasoning Graph the set of ordered pairs (0, 2), (1, 4), (2, 6), (3, 8). Determine whether the relationship is a linear function. Explain how you know.



8. You can make a bubble solution by mixing 1 cup of liquid soap with 4 cups of water. Represent the relationship between the cups of liquid soap and the cups of bubble solution made using a table, an equation, and a graph. Is the amount of bubble solution made a function of the amount of liquid soap used? Explain.

