

Warm-Up

March 16, 2018

1. A taxi company charges 2.70 plus 1.60 per km. Write an equation.

don't forget a let statement

Let "d" represent distance $C = 2.70 + 1.60d$

2. Write the equation given the following data table.

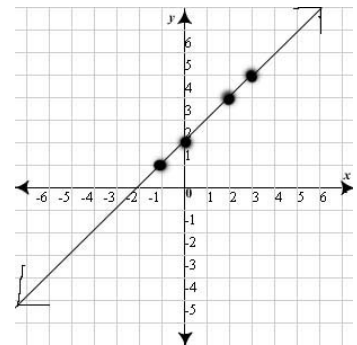
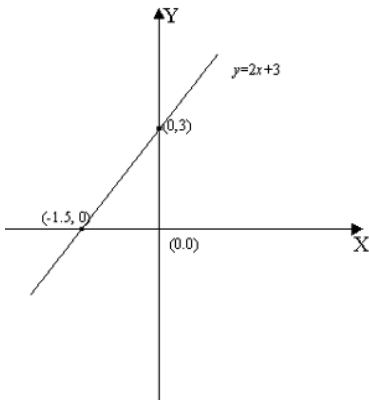
number of squares [n]	number of triangles [t]
1	4 $> + 2$
2	6 $> + 2$
3	8 $> + 2$
4	10

$$t = 2n + 2$$

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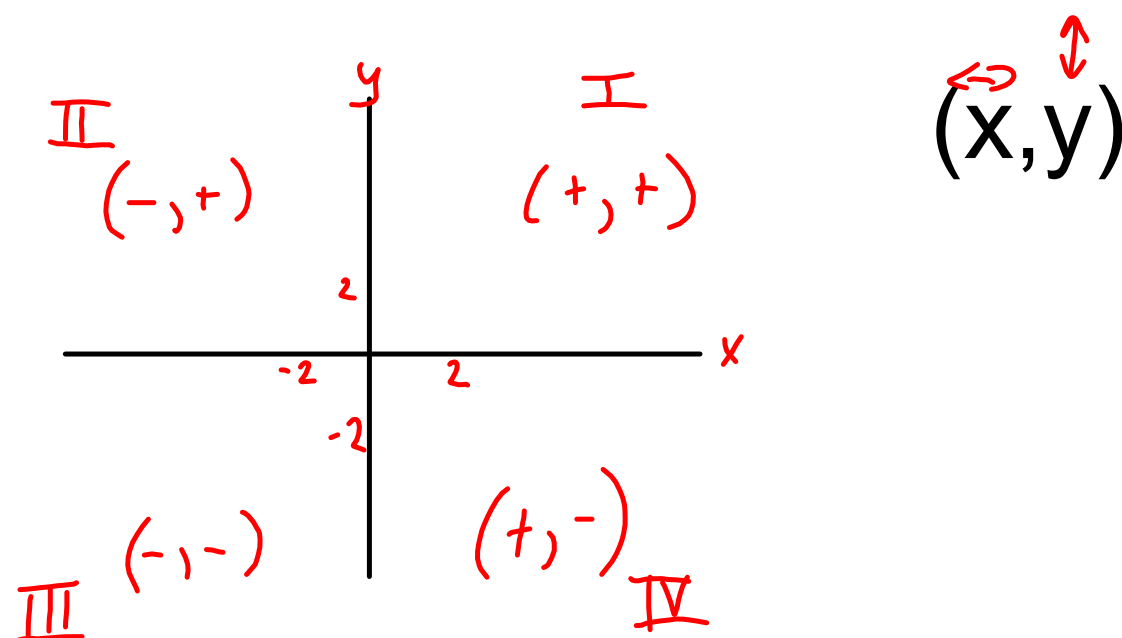
Section 4.2

Linear Relations



Do you remember how to plot points?

Graph Review



Remember ME

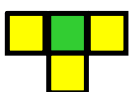


Figure 1

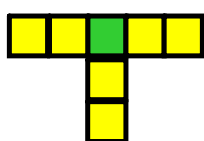


Figure 2

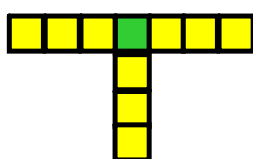


Figure 3

Write an equation that relates the number of blocks, n , to the figure number, f .

Figure # $[f]$	# of Blocks $[n]$
1	4 $> f^3$
2	7 $> f^3$
3	10
6	19
10	31

1

4 $> f^3$

$$n = 3f + 1$$

2

7 $> f^3$

3

10

6

19

10

31

Remember ME

Let's look at it again.

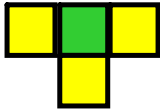


Figure 1

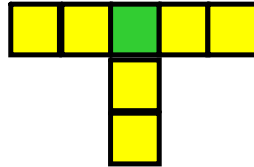


Figure 2

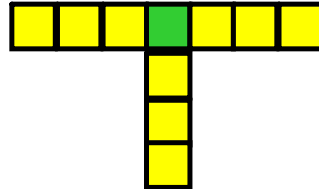
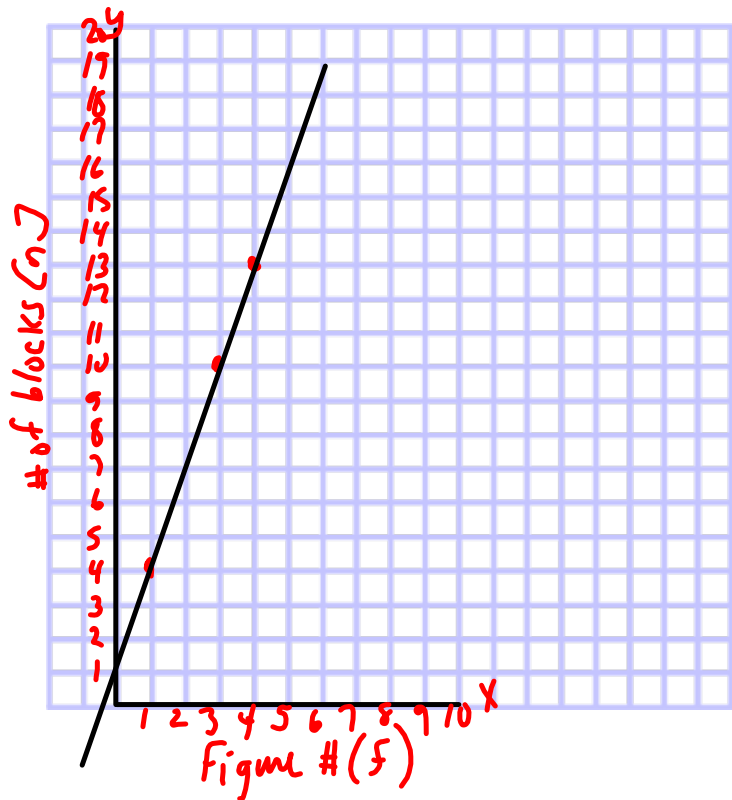


Figure 3



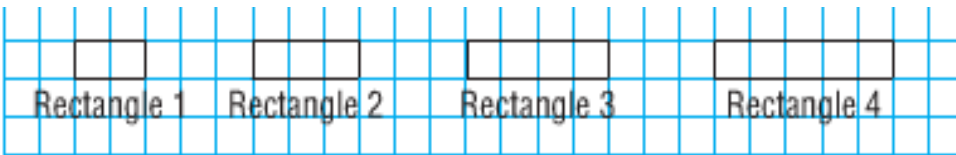
Figure #	# of Blocks	point (x,y)
1	4	(1,4)
2	7	(2,7)
3	10	(3,10)
4	13	
5	16	
6	19	(6,19)
10	31	

Handwritten notes: Blue arrows point from the '3' in the third column to the '4', '7', and '10' in the second column. The word 'point' is written in red above the third column.



- Describe the relationship between figure number and number of blocks.

As f increases by 1, n increases by 3.



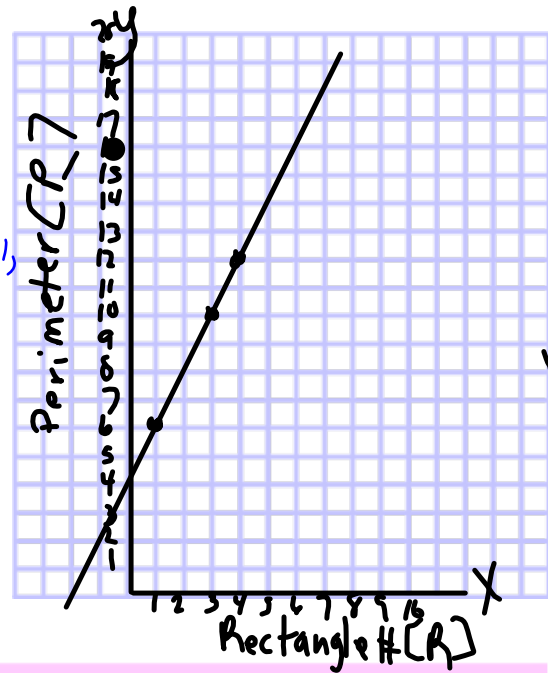
A. Make a table of values for the Rectangle number and the perimeter .

B) Write the equation
 $P = 2R + 4$

C) Describe the relation.
 As R increases by 1, P increases by 2

D) Graph

Rectangle # [R]	Perimeter [P]
1	6
2	8
3	10
4	12



Linear Relation

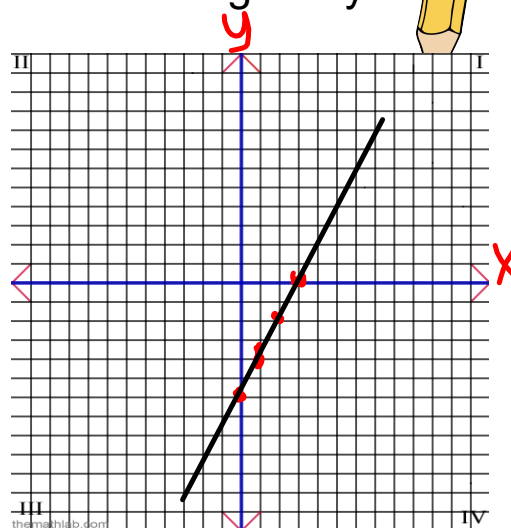
- is when the graph is a straight line
- a constant change in 'x' causes a constant change in 'y'



Table of Values

x	y
0	-6
1	-4
2	-2
3	0

Handwritten blue annotations: Brackets on the right side of the table indicate a constant increase of +2 in the y-value for each unit increase in the x-value.



A) Describe the relation.

As x increases by 1, y increases by 2

B) Is it linear?