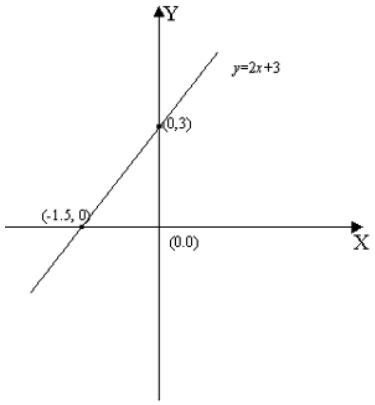
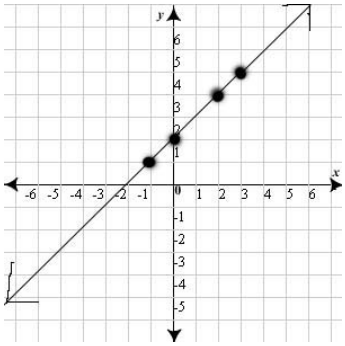
Section 4.2

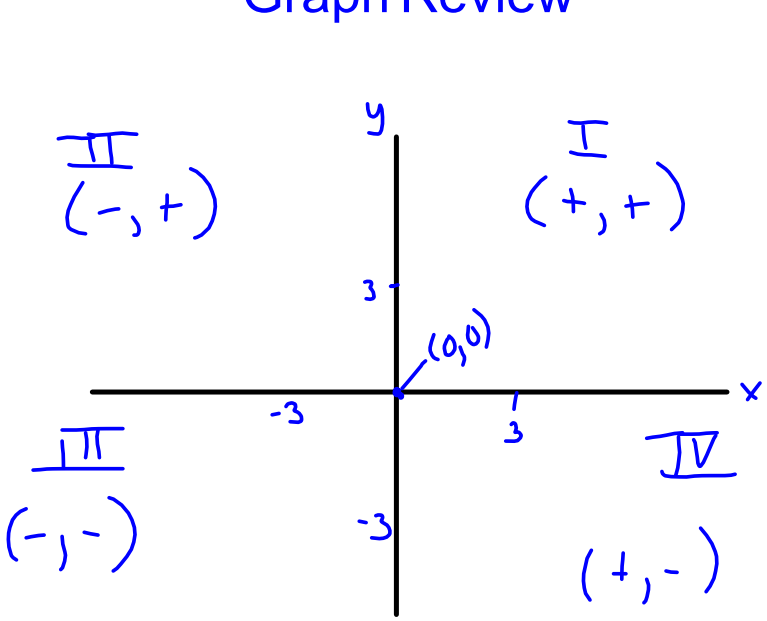
Linear Relations





Do you remember how to plot points?

Graph Review



(x,y)

(0,0) → origin

Remember ME

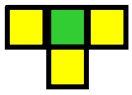


Figure 1

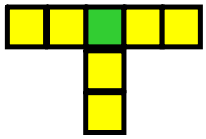


Figure 2

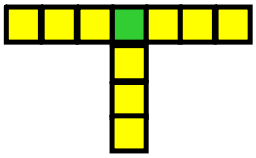


Figure 3

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

Figure #	# of Blocks
1	_____
2	_____
___	_____
6	_____
10	_____

Remember ME

Let's look at it again.

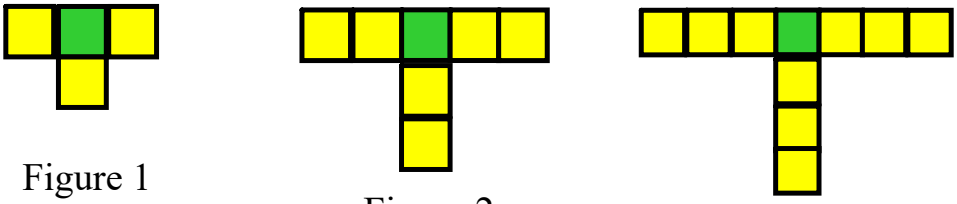
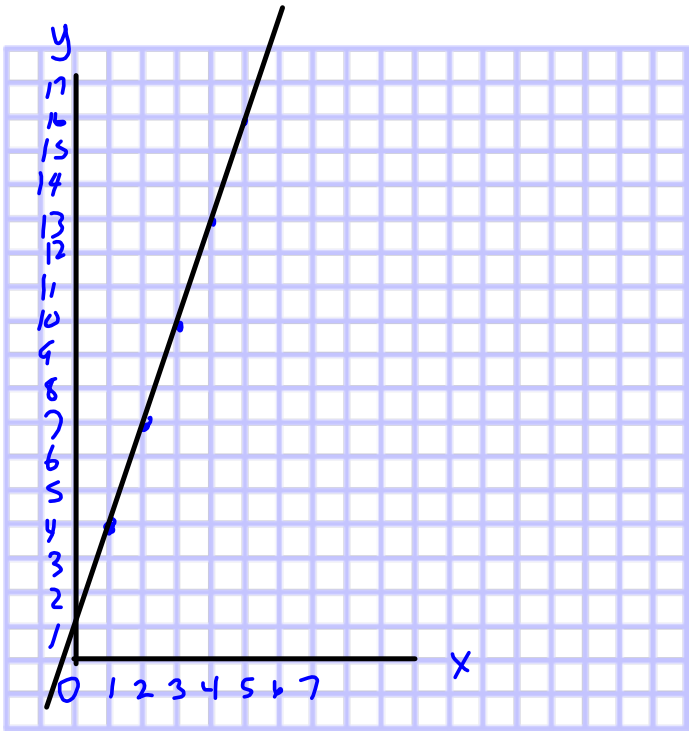


Figure 1 Figure 2 Figure 3

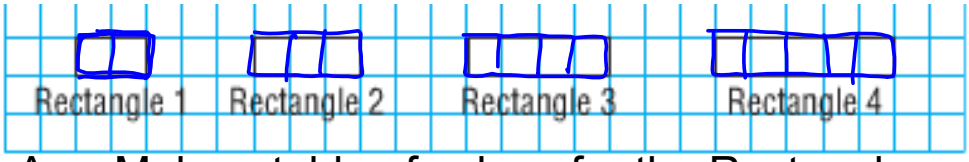
(f) (b) (x,y)

Figure #	# of Blocks	point
1	4	(1,4)
2	7	(2,7)
3	10	(3,10)
4	13	(4,13)
5	16	(5,16)



a) write the equation? $b = 3f + 1$

- b) Describe the relationship between figure number and number of blocks. As f increases by 1, b increases by 3.



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

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

points

+2, ×2, +2

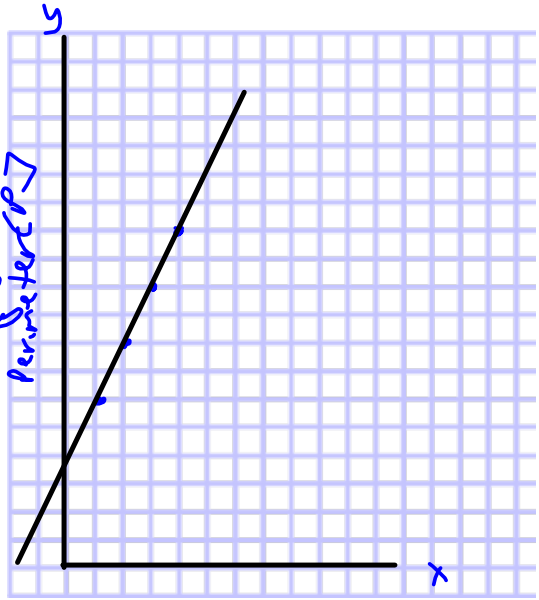
B) Write the equation

$P = 2R + 4$

C) Describe the relation.

As R increases by 1, P increases by 2

D) Graph

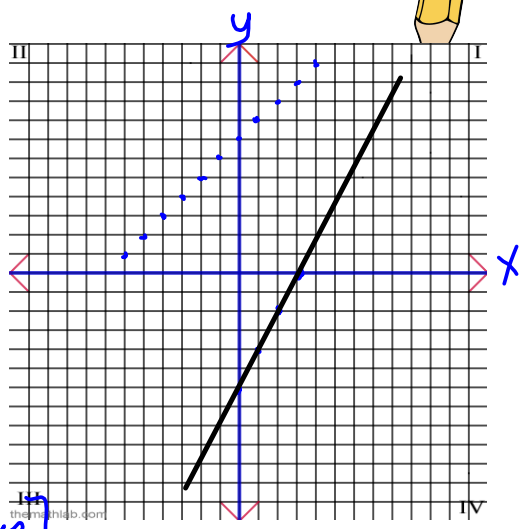


Linear Relation

- 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	+2
1	-4	+2
2	-2	+2
3	0	



A) Describe the relation. [table of values]

As x increases by 1, y increase by 2

B) Is it linear? [graph] yes

Page 170 #4 yes or no [a-e]

#5 copy table Describe

Answers
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