

1. Complete the tables below.

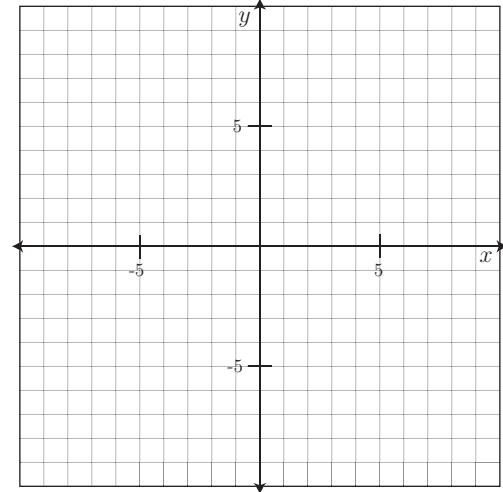
(a)

x	-2	-1	0	1	2
$y = x + 4$					

(b)

x	-2	-1	0	1	2
$y = 4x$					

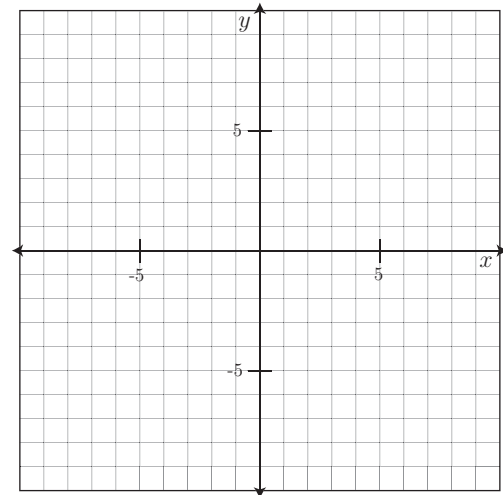
2. Sketch the graphs of 1(a) and (b) on the axes below.



3. Sketch the graphs below on the same axes.

- (a) $y = x$
- (b) $y = 2x$
- (c) $y = 3x$
- (d) $y = 4x$

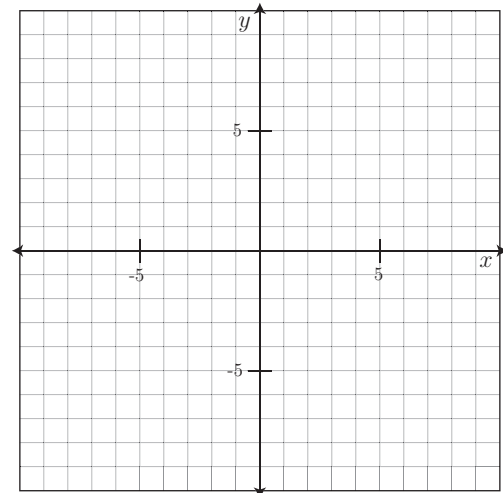
What do you observe about the relationship between the formulas and their graphs?



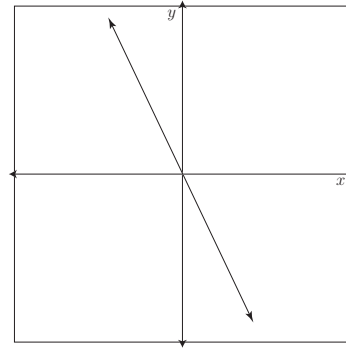
4. Sketch the graphs below on the same axes.

- (a) $y = x$
- (b) $y = x + 2$
- (c) $y = x + 3$
- (d) $y = x + 4$

What do you observe about the relationship between the formulas and their graphs?



5. Estimate the equation of the line sketched below.



6. Karen earns \$8 per hour working for the BK Lounge. What is her income if she works for...

hours	dollars
1	
2	
3	
4	
⋮	
t	

7. Eva drives her car at 70 mph. How far will she have travelled if she drives for...

hours	distance
1	
2	
3	
⋮	
t	

8. The tables from question (1) are shown below. Notice that in (a) the increase in x and the increase in y are both 1 (a number that doesn't obviously appear in the equation). In (b), however, y increases by 4 as x increases by 1. Notice where the 4 shows up in that equation.

(a)

		+1	+1	+1	+1
x	-2	-1	0	1	2
$y = x + 4$	2	3	4	5	6
		+1	+1	+1	+1

(b)

		+1	+1	+1	+1
x	-2	-1	0	1	2
$y = 4x$	-8	-4	0	4	8
		+4	+4	+4	+4

Complete the two tables below and see what you can discover. (Note the input values in the first table and try to understand why those were chosen.)

(c)

x	-12	-6	0	6	12
$y = \frac{5}{6}x$					

(d)

x	-8	-4	0	4	8
$y = \frac{3}{4}x$					