

Straight Line Graphs

On the axes draw and label the following straight line graphs (you will not be able to plot all the points on the axes):

1. $y = x$ (the y is the same as the x)

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

2. $y = 2x$ (times all x by 2)

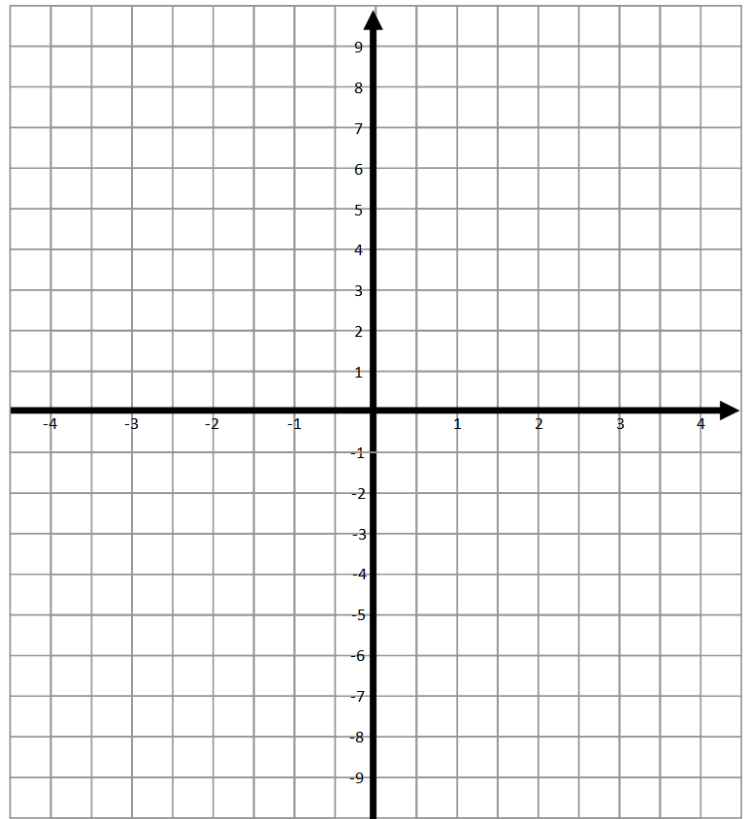
x	-4	-3	-2	-1	0	1	2	3	4
y									

3. $y = x + 4$

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

4. $y = x - 6$

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



Use the new set of axes for these graphs.

5. $y = -x$ (multiply all x by -1)

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

6. $y = 2x + 1$ (multiply all x by 2 then add 1)

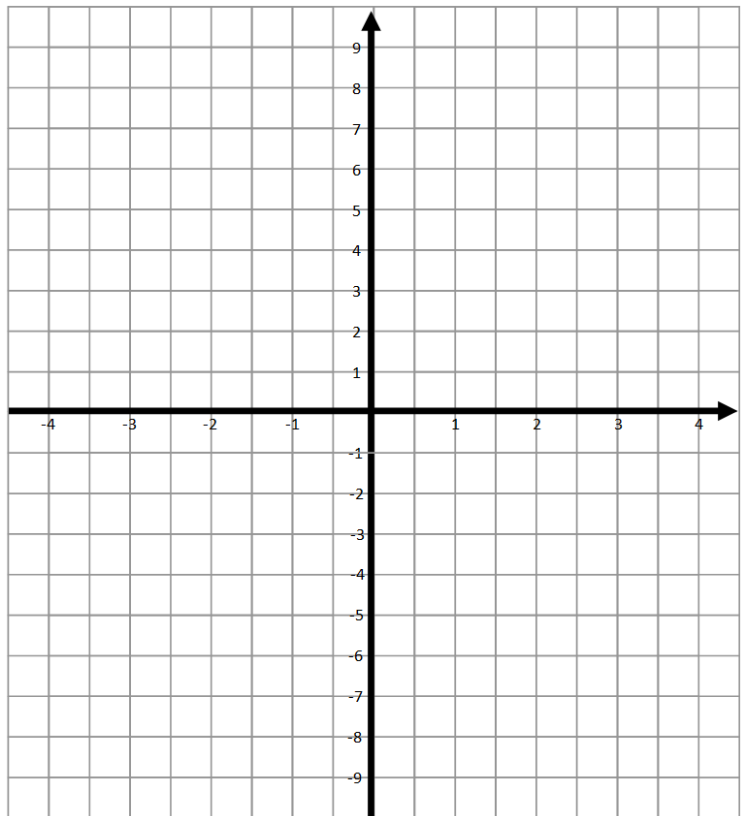
x	-4	-3	-2	-1	0	1	2	3	4
y									

7. $y = 3x - 4$ (multiply all x by 3 then subtract 4)

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

8. $y = -2x$ (multiply all x by -2)

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



9. $x + y = 6$ (y added to x needs to make 6)

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

10. $x + y = -2$ (y added to x needs to make -2)

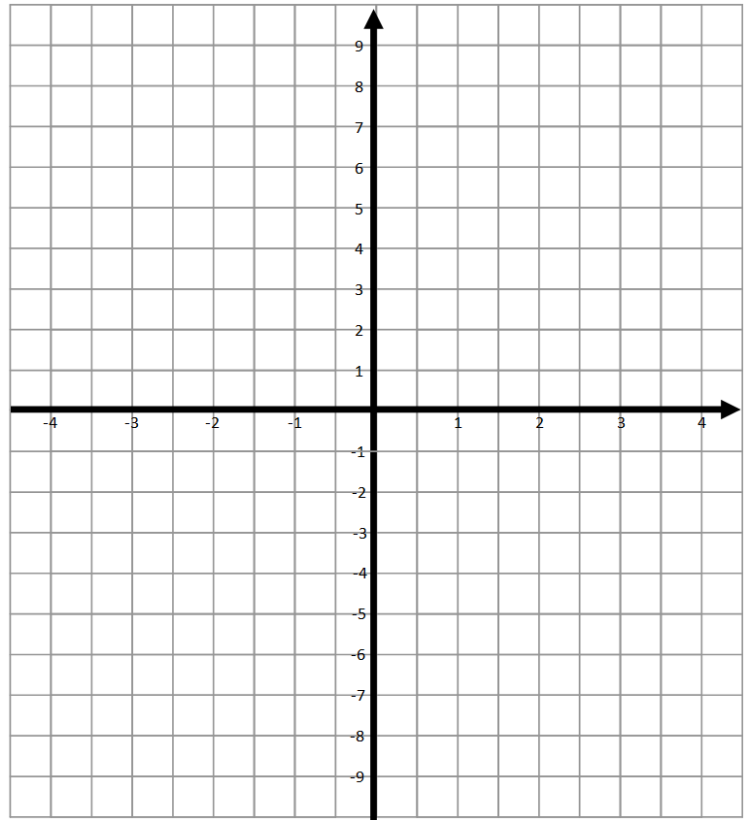
x	-4	-3	-2	-1	0	1	2	3	4
y									-6

11. $y - x = 3$

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

12. $y - x = -4$

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



These will look a bit different to the ones you have done so far. They can all be done on the following axes, (no tables needed)

13. $y = 6$ (the y coordinate is always 6)

14. $x = 3$ (the x coordinate is always 6)

15. $y = -3$

16. $x = -4$

17. $x = 0$

18. $y = 0$

19. What do we normally call the line $x = 0$?

20. What do we normally call the line $y = 0$?

