Drawing straight line graphs from a table
Example y = 2x + 1
You can substitute in x coordinates to find the y coordinates, plot them & draw graphs

x	0	1	2	3
y	1	3	5	7

Now plot the points (0,1), (1,3), (2,5) and (3,7) and draw a straight line through them (use a simple 1 x 1 axis in your book)

Task 1
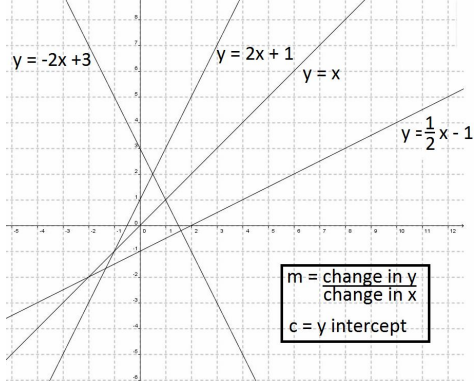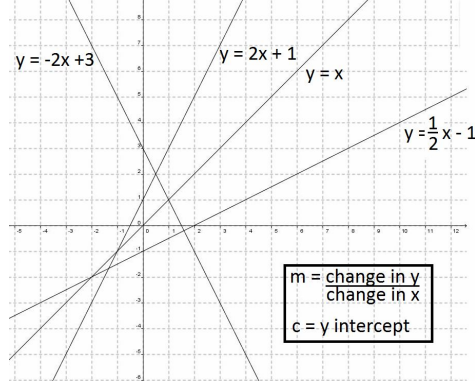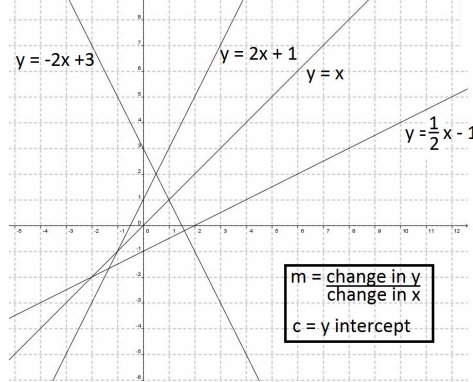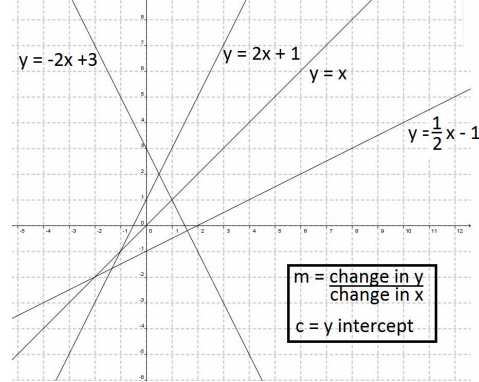Copy tables and draw the graphs of the following lines

y= 2x -1	y = x + 3	y = -x +1
y = ½x+ 1	y = 3-x	y = 3x

The equation of a straight line is
y = mx + c
m is the gradient (or the change in y ÷ the change in x) and **c** is the y intercept.
y = 3x - 1 has a gradient of 3 and y intercept of -1. Some lines are shown below

Task 2
Without drawing a table of values graph and label the following lines.

y = x + 1	y = 2x -1	y = 3x + 2
y = ½ x + 1	y = x	y = -2x + 3
y = -x + 1	y = 3 + 2x	y = 4 - x
y − x = 2	y = ¼ x	x = 2

Task 3
The gradient of a line is the change in y ÷ change in x. by plotting the 2 points given (i) find the gradient of the line (ii) The equation of the line

A:(2,2) B:(3,3)	A:(1,3) B:(2,5)	A:(2,2) B:(3,3)
A:(4,2) B:(5,5)	A:(1,0) B:(1,5)	A:(1,0) B:(4,1)

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