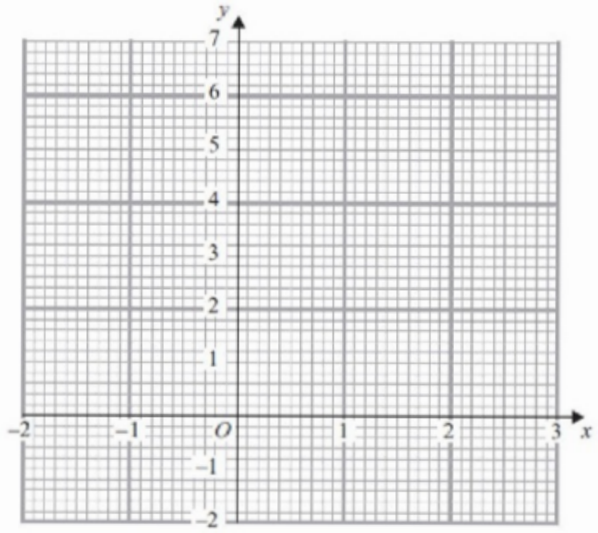
13. (a) Complete the table of values for $3x + 2y = 6$

x	–2	–1	0	1	2	3
y		4.5	3			–1.5

(2)

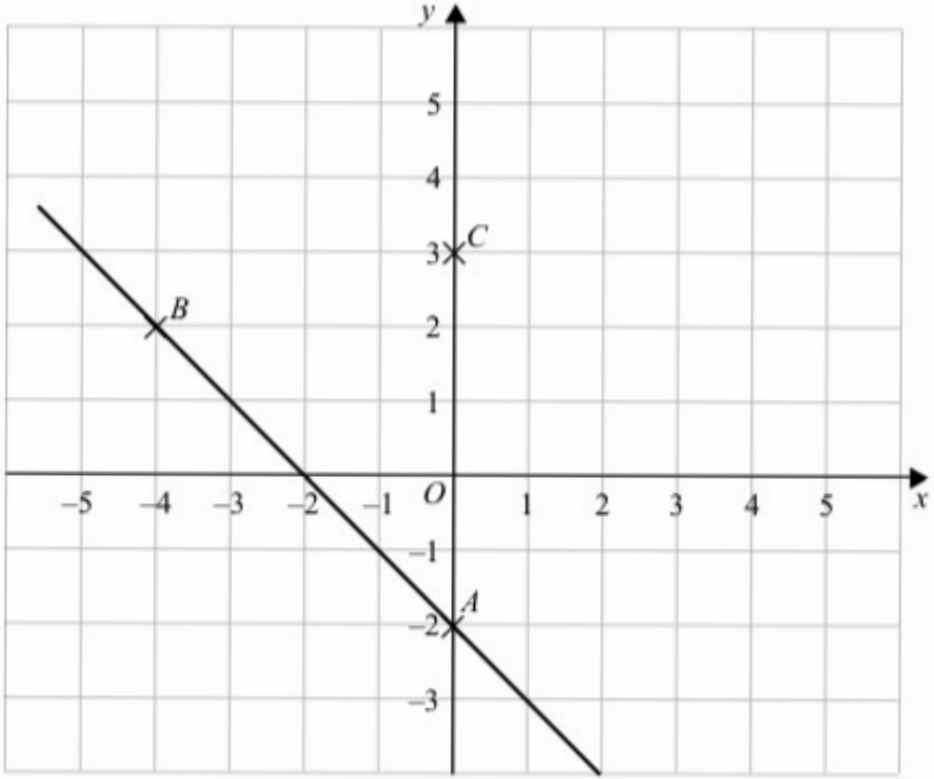
(b) On the grid, draw the graph of $3x + 2y = 6$



(2)

(c) Find the gradient of the graph of $3x + 2y = 6$

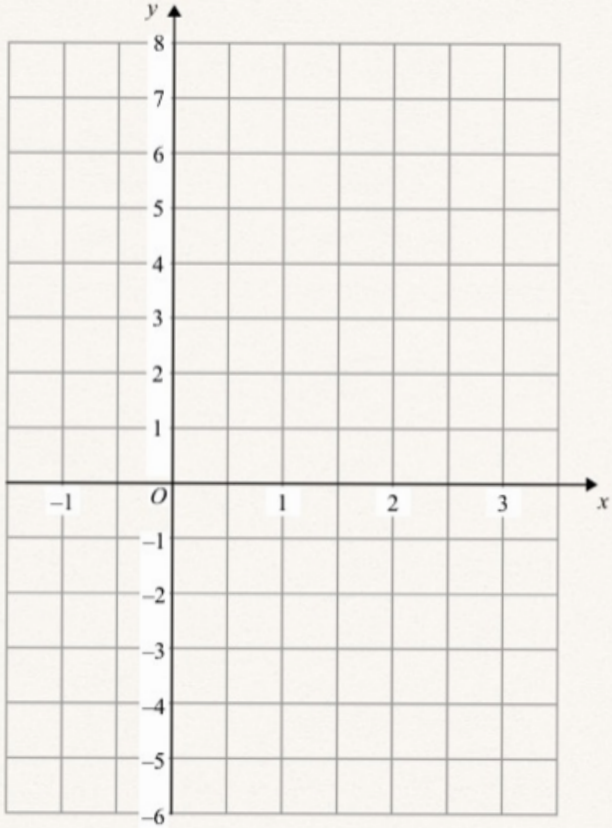
17.



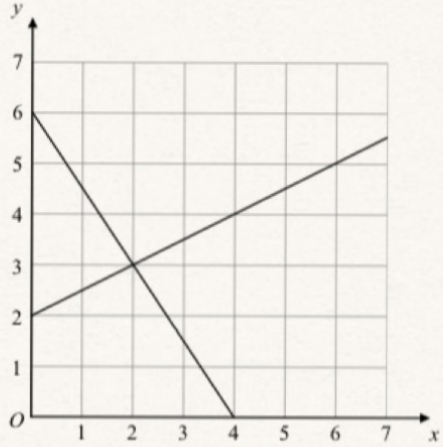
In the diagram A is the point $(0, -2)$,
B is the point $(-4, 2)$,
C is the point $(0, 3)$.

Find an equation of the line that passes through C and is parallel to AB.

4 On the grid, draw the graph of $y = 3x - 2$ for values of x from -1 to 3



19.



The diagram shows graphs of $y = \frac{1}{2}x + 2$

and $2y + 3x = 12$

(a) Use the diagram to solve the simultaneous equations

$$y = \frac{1}{2}x + 2$$

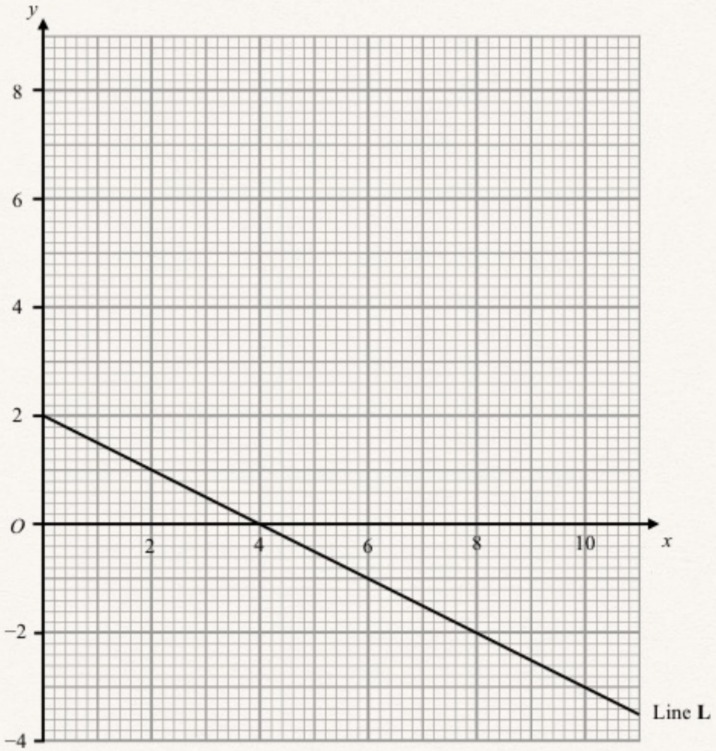
$$2y + 3x = 12$$

$x =$ ..... $y =$ .....

(1)

(b) Find an equation of the straight line which is parallel to the line $y = \frac{1}{2}x + 2$ and passes through the point (0, 4).

21.



Line **L** is drawn on the grid.

(a) Work out the gradient of Line **L**.

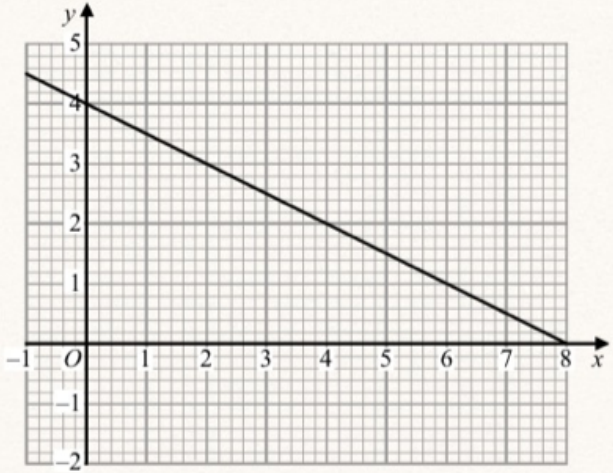
.....

(2)

Another line, Line **M**, is parallel to Line **L** and passes through the point (6, 2).

(b) Find an equation for Line **M**.

13.



The graph of the straight line $x + 2y = 8$ is shown on the grid.

(a) On the grid, draw the graph of $y = \frac{x}{2} - 1$

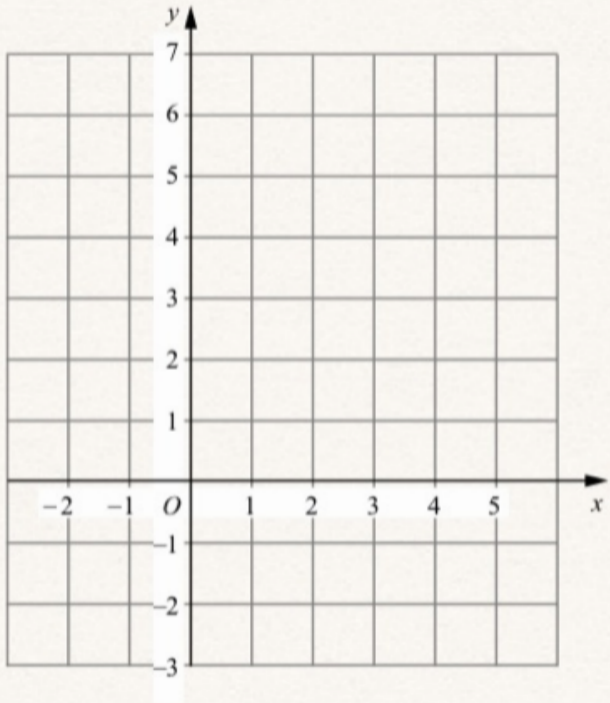
(3)

(b) Use the graphs to find estimates for the solution of

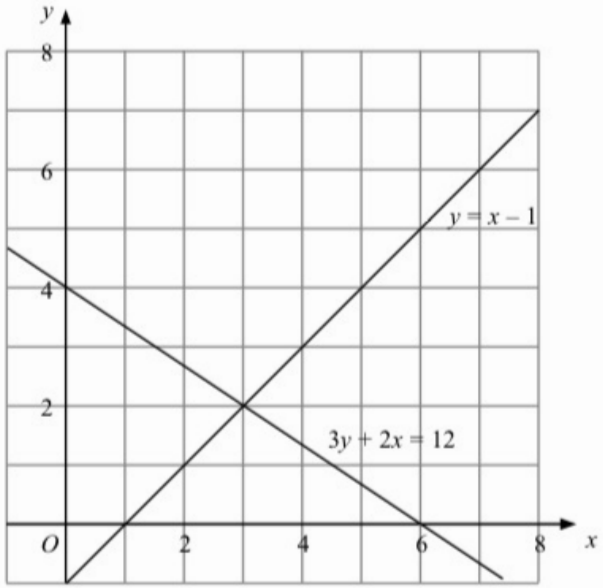
$$x + 2y = 8$$

$$y = \frac{x}{2} - 1$$

8. On the grid draw the graph of $x + y = 4$ for values of x from -2 to 5



12. The graphs of the straight lines with equations $3y + 2x = 12$ and $y = x - 1$ have been drawn on the grid.



(a) Use the graphs to solve the simultaneous equations

$$3y + 2x = 12$$
$$y = x - 1$$

$x =$ .....

$y =$ .....

(1)

(b) $3y + 2x > 12$ $\quad y < x - 1$ $\quad x < 6$

x and y are integers.

On the grid, mark with a cross (×) each of the **four** points which satisfies **all** these 3 inequalities.

(3)

18. The region **R** satisfies the inequalities

$$x \geqslant 2, \quad y \geqslant 1, \quad x + y \leqslant 6$$

On the grid below, draw straight lines and use shading to show the region **R**.