

# Find the equation of a straight line using $y = mx + c$

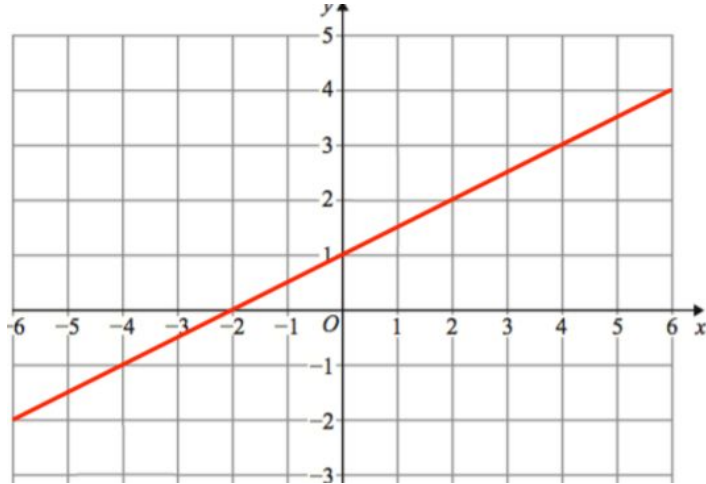
Maths

Mr Clasper



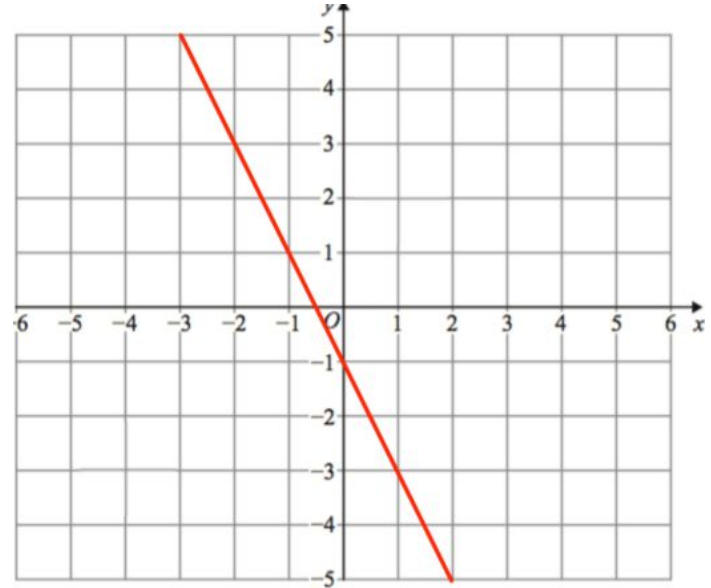
# Find the equation of a straight line using $y = mx + c$

1. A straight line is shown on the grid.



a) Work out the equation of the line.

2. A straight line is shown on the grid.



a) Work out the equation of the line.



## Find the equation of a straight line using $y = mx + c$

3. A line has equation  $y = 3 - 2x$

a) Find the gradient of the line.

b) Find where the line crosses the y-axis.

4. The point A  $(-3, 5)$  and the point B  $(1, -15)$  lie on the line M.

Find the equation of the line M.

5. The equations of four lines are given below.

**Line A**  $y = 4x + 1$

**Line B**  $y = -4x - 1$

**Line C**  $y = 5 + 2x$

**Line D**  $y = 2x + 6$

Which lines go through the point  $(2, 9)$ ?

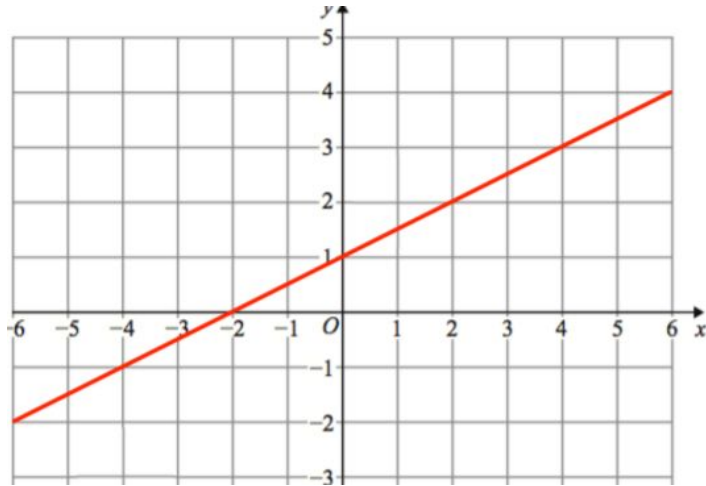


# Answers



# Find the equation of a straight line using $y = mx + c$

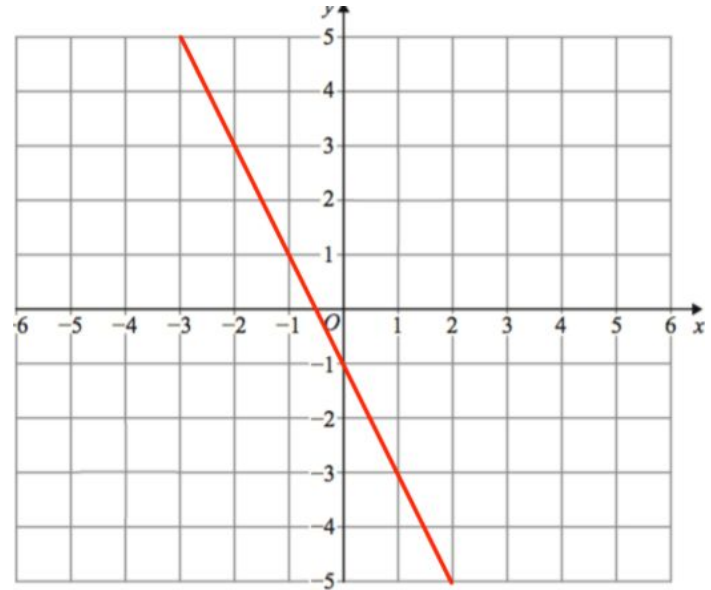
1. A straight line is shown on the grid.



a) Work out the equation of the line.

$$y = 0.5x + 1$$

2. A straight line is shown on the grid.



a) Work out the equation of the line.

$$y = -2x - 1$$



# Find the equation of a straight line using $y = mx + c$

3. A line has equation  $y = 3 - 2x$

a) Find the gradient of the line.

$-2$

b) Find where the line crosses the y-axis.

$(0, 3)$

4. The point A  $(-3, 5)$  and the point B  $(1, -15)$  lie on the line M.

Find the equation of the line M.

$$y = -5x - 10$$

5. The equations of four lines are given below.

**Line A**  $y = 4x + 1$

**Line B**  $y = -4x - 1$

**Line C**  $y = 5 + 2x$

**Line D**  $y = 2x + 6$

Which lines go through the point  $(2, 9)$ ?

**Lines A and C**

