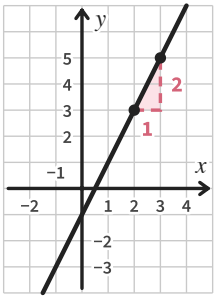
Finding the Equation of a Line

1

Find the equation of the line.



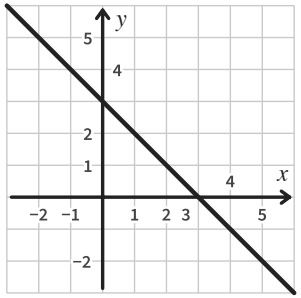
$c =$ **−1**

$m =$ $\frac{2}{1} = 2$

Equation _____

2

Find the equation of the line.



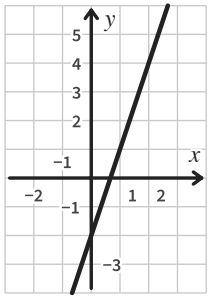
$c =$ **3**

$m =$

Equation _____

3

Find the equation of the line.



$c =$

$m =$

Equation _____

4

A line has gradient 2 and passes through the point **(3, 11)**. Find the equation of the line.

$y = 2x + c$

$c =$

Equation _____

5

A line has gradient −4 and passes through the point **(1, 6)**. Find the equation of the line.

$c =$

Equation _____

6

Find the equation of the line through **(1, 3)** and **(4, 15)**.

gradient =

$c =$

Equation _____

7 *Notice the change!*

Find the equation of the line parallel to $y = 3x + 4$ that passes through **(2, 9)**.

gradient =

$c =$

Equation _____

8

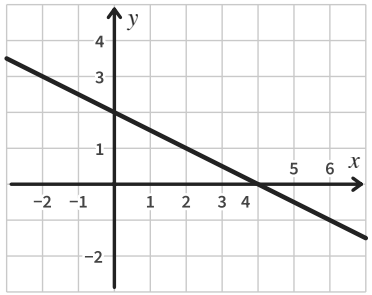
Ravi finds the line through **(1, 4)** and **(3, 10)**. He writes $y = 3x + 4$.
Explain his mistake.
Find the correct equation.

Equation _____

Finding the Equation of a Line *further practice*

9

Find the equation of the line.



Answer _____

10

Find the equation of the line through (−2, 5) and (2, −3).

Answer _____

11

Find the equation of the line through (2, 4) and (8, 7).

Answer _____

12

Find the equation of the line parallel to $2y = 6x + 1$ that passes through (1, 5).

Answer _____

13

Which two of these lines are parallel?

A $y = 4x - 3$

B $2y = 4x + 7$

C $y = 3 + 4x$

D $4y = x + 4$

Answer _____

14

A line passes through (0, −3) and (4, 5). Does it pass through (7, 11)? Show how you know.

Answer _____

15

A line crosses the y axis at 6 and the x axis at 3. Find its equation.

Answer _____

16

The line $y = 3x + c$ passes through (2, 1) and $(k, 10)$. Find c and k.

Answer _____