

$$5.1) y = mx + c$$

## Worked example

Calculate the gradient between the coordinates:

$(2, 1)$  and  $(5, 7)$

$(-2, -1)$  and  $(5, 7)$

## Your turn

Calculate the gradient between the coordinates:

$(-4, 2)$  and  $(6, 8)$

$\frac{3}{5}$

## Worked example

Calculate the gradient between the coordinates:

$(2, 1)$  and  $(5, -7)$

$(2, -1)$  and  $(-5, -7)$

## Your turn

Calculate the gradient between the coordinates:

$(-4, 2)$  and  $(-6, -8)$

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## Worked example

The gradient connecting the two points  $(2a, 5)$  and  $(7a, 8)$  is 6.  
Solve for  $a$

## Your turn

The gradient connecting the two points  $(3a, 7)$  and  $(5a, 12)$  is 6.  
Solve for  $a$

$$a = \frac{5}{12}$$

## Worked example

The gradient connecting the two points  $(2, -5)$  and  $(a, b)$  is 4. Find an expression for  $b$  in terms of  $a$

## Your turn

The gradient connecting the two points  $(-3, 4)$  and  $(a, b)$  is 2. Find an expression for  $b$  in terms of  $a$

$$b = 2a + 10$$