

## Equations using one point and the gradient

### Example

Find the equation of the line that goes through (3,5) and has gradient 2.

### Quickfire Questions

<u>Gradient</u>	<u>Point</u>	<u>(Unsimplified) Equation</u>
<u>3</u>	<u>(1,2)</u>	
<u>5</u>	<u>(3,0)</u>	
<u>2</u>	<u>(-3,4)</u>	
<u><math>\frac{1}{2}</math></u>	<u>(1,-5)</u>	
<u>9</u>	<u>(-4,-4)</u>	

### Finding a line using 2 Points:



#### Example

1. Find the equation of the line that goes through (4,5) and (6,2), giving your equation in the form

$$ax + by + c = 0.$$

#### Test Your Understanding:

1. Find the equation of the line that goes through (−1,9) and (4,5), giving your equation in the form

$$ax + by + c = 0.$$