## Find the area under a straight line

Maths

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## Find the area under a straight line

1. Work out the area under the straight line between $x=1$ and $x=5$ ?

2. Here is the journey of a sports car.


How far does the car travel in 12 seconds?

## Find the area under a straight line

3. The graph opposite shows the journey of a train as it accelerates from a speed of $12 \mathrm{~m} / \mathrm{s}$.

The acceleration is constant for 50 seconds.

The total distance travelled is 1.3 km .

What is the final speed of the train?

Answers

## Find the area under a straight line

1. Work out the area under the straight line between $x=1$ and $x=5$ ?


52 units $^{2}$
2. Here is the journey of a sports car.


How far does the car travel in 12 seconds? 450 metres

## Find the area under a straight line

3. The graph opposite shows the journey of a train as it accelerates from a speed of $12 \mathrm{~m} / \mathrm{s}$.

The acceleration is constant for 50 seconds.

The total distance travelled is 1.3 km .

What is the final speed of the train?

$40 \mathrm{~m} / \mathrm{s}$

