

1. A train travels x miles in 2 hours.

(b) Write down an expression, in terms of x , for the average speed of the train.

..... miles per hour
(1)

(Total for Question 1 is 1 mark)

2 Jenny drives from London to Swindon at an average speed of 54 miles per hour.

She drives for $1\frac{1}{2}$ hours.

(a) Work out the distance from London to Swindon.

..... miles
(2)

Aleksy is using a map.

The map has a scale of 1 : 25 000

On the map a road has a length of 6 cm.

(b) Work out the length, in kilometres, of the real road.

..... kilometres
(3)

(Total for Question 2 is 5 marks)

3



$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

A storage tank exerts a force of 10 000 newtons on the ground.

The base of the tank in contact with the ground is a 4 m by 2 m rectangle.

Work out the pressure on the ground due to the tank.

..... newtons/m²

(Total for Question 3 is 2 marks)

4 A solid cuboid is made of metal.

The metal has a density of 9 g/cm^3

The volume of the cuboid is 72 cm^3

Work out the mass of the cuboid.

..... g

(Total for Question 4 is 2 marks)