

1 Convert 11.2 kilometres into miles.

Use $8 \text{ km} = 5 \text{ miles}$

[2 marks]

Answer _____ miles

2 The heel of a shoe exerts a pressure of 198 pounds per square inch.

Convert this pressure into kilograms per square centimetre.

Use

$$1 \text{ pound} = 0.45 \text{ kilograms}$$

$$1 \text{ square inch} = 6.25 \text{ square centimetres}$$

[3 marks]

Answer _____ kg/cm^2

3

Tom and Adil are the two runners in a 200-metre race.
Tom completes the race in 24 seconds.
Adil completes the race at an average speed of 28.8 kilometres per hour.

Who wins the race?
You **must** show your working.

[3 marks]

Answer

4 Convert 7 gallons to litres.

Use 1 gallon = 4.5 litres

[2 marks]

Answer _____ litres

5 Jamil is on holiday in France.

5 (a) The cost of a room in a hostel is 27 euros.

Convert the cost to £

Use $\text{£}1 = 1.2 \text{ euros}$

[2 marks]

Answer £ _____

5 (b) Jamil rides a motorbike.

The motorbike uses one litre of petrol for every 14 miles.

How many litres of petrol does the motorbike use to go 168 kilometres?

Use $8 \text{ kilometres} = 5 \text{ miles}$

[3 marks]

Answer _____ litres

6 (a) Complete the statement.

[1 mark]

2 metres = _____ centimetres

6 (b) Complete the statement.

[1 mark]

8 kilograms = _____ grams

6 (c) Convert 24 kilometres to miles.

Use 8 kilometres = 5 miles

[2 marks]

Answer _____ miles

7

Town A has

a population of 84 000

an area of 7 **square miles**.Town B has a population density of 4695 people per **square kilometre**.

$$\text{Population density} = \frac{\text{population}}{\text{area}}$$

Which town has the greater population density?

Use 1 square mile = 2.6 square kilometres

Tick a box.

Town A

☐

Town B

☐

Show working to support your answer.

[3 marks]
