

# Compound measures

A car travels 100 km in 2hrs. What is its average speed in km/h? In m/s?

Another car travels 100 km in 2hrs 30 minutes. What is its average speed in km/h? In m/s?

An object has density  $45\text{kg/m}^3$  and a mass of 135kg. What is the object's volume?

A jet flies for 3hrs 20 minutes at an average speed of 600mph. How far does it fly?

Lewis Hamilton does a lap of Monaco in 1 minute 20 seconds. If one lap is 3.3km long, what was his average speed in km/min? In km/h?

A block of concrete is 3cm wide, 4cm high and 5cm long. It has a mass of 15kg. What is its density in  $\text{kg/cm}^3$ ? In  $\text{kg/m}^3$ ?

A person drives 15km to the shops at an average speed of 30km/h, then drives back at an average speed of 60km/h. What is their average speed over the two journeys?

(Hint: The answer is not 45km/h!!)