

Ratio, proportion and rates of change

Units of measure

① Convert these measurements. (★)

a 4 m to cm (1 mark) ←

.....

b 5000 g to kg (1 mark)

.....

c 1.5 litres to ml (1 mark)

.....

d 8250 m to km (1 mark)

.....

[Total: 4 marks]

② Sally made 6 litres of lemonade. Her friends drank 3500 ml. How many ml did Sally have left? (2 marks, ★★★)

.....

③ Luke and his brother Adam left home at the same time. Luke ran to school in 240 seconds. Adam ran to school in 3 minutes 47 seconds. (★★★)

a Which brother arrived at school first?
You must show your working. (2 marks)

.....

b How long did the first boy at school wait for his brother to arrive? (1 mark)

.....

[Total: 3 marks]

④ 1 m \approx 3.2 feet



Ben is 1.25 m; Tom is 4.8 feet. Who is taller?

You must show working to justify your answer. (2 marks, ★★★★★)

Ask yourself:

1 What is the conversion factor? (How many cm in 1 m?)

2 Do you expect the number in your answer (in cm) to be more or less than the original number (4)?

3 If more, then multiply by the conversion factor; if less, then divide by the conversion factor.



NAIL IT!

Watch out for questions that have two different units of measure (for example litres and millilitres).

Convert one of the measures so you are working in only one type of unit.