

Converting lengths

Convert between kilometres and metres, centimetres and metres, and centimetres and millimetres



Each division on the rulers is 1 mm. Find the length of each nail.

Write your answer in: **i** millimetres **ii** centimetres

Example

i 12 mm **ii** 1.2 cm

a

b

c



1 Write these distances in metres.

- a** 1.32 km **b** 0.53 km **c** 2.08 km **d** 3.82 km

2 A bus travelled the following distances. Write these distances in kilometres with 2 decimal places.

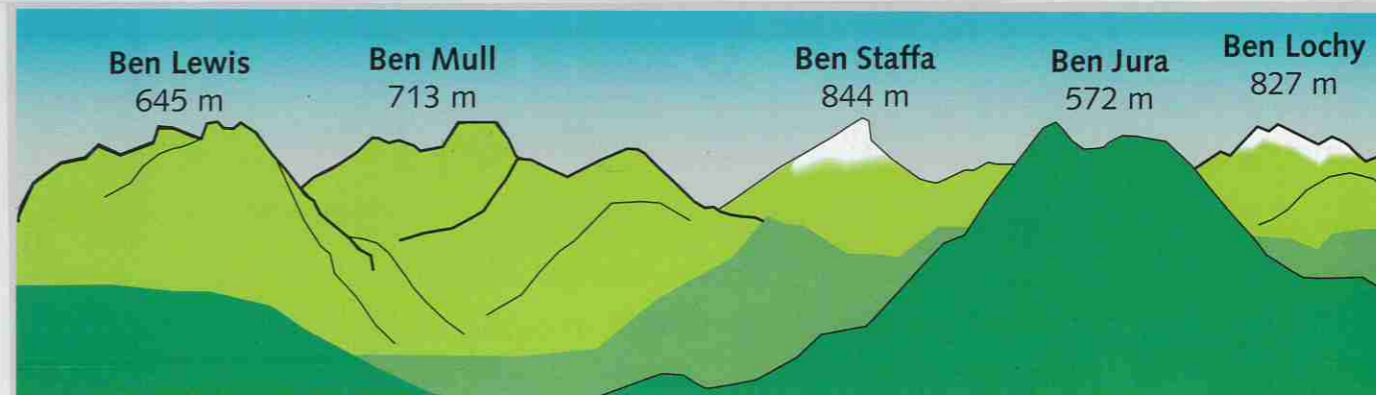
- a** 4170 m **b** 6090 m
c 12 570 m **d** 20 030 m



3 Write these lengths in metres using decimals.

- a** 750 cm **b** 640 cm **c** 2810 cm **d** 1360 mm **e** 990 mm **f** 1040 mm

4 The picture below shows the heights of five mountains.



- a** Round the height of each mountain to the nearest 10 metres.
b Now write the height of each mountain in kilometres with 2 decimal places.

Example

Ben Muckle 791 m
 791 m rounds to 790 m
 790 m = 0.79 km

5 The picture of the five mountains is a view from the top of Ben Muckle. These are the distances from Ben Muckle to each of the other mountains. Write these distances in order. Start with the nearest mountain.

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|-----------------------|----------------------|----------------------|----------------------|-------------------------|
| Ben Lewis 12.85 km | Ben Mull 16 700 m | Ben Staffa 19½ km | Ben Jura 10 820 m | Ben Lochy 21 km 50 m |
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Challenge 3

Amy and Lily reach the top of Ben Muckle. Amy writes down the height of the mountain in her log book, then adds a few lines of calculations.

Amy says, "I can make all the mountains that we can see the same height." Lily thinks this is nonsense.

Work out how Amy got from 791 to 1089 and then follow the same steps for the other mountains at the top of the page. What do you notice?

$$\begin{array}{r} 6 \quad 18 \quad 11 \\ 791 \\ + 298 \\ \hline 1089 \end{array}$$

Hint

Look at the numbers in the calculations. Can you see what Amy has done?

