Measurement units and precision

6 questions | 11 marks

Equivalent correct methods earn the corresponding marks.

1. Choose a useful metric unit for the distance between towns. [1 mark]

A distance between towns is large enough that kilometres give a useful number.

Answer: Kilometres (km)

2. Choose a useful metric unit for the mass of an apple. [1 mark]

Grams give a useful number for an object much lighter than a kilogram.

Answer: Grams (g)

3. Convert 3 m to centimetres. [2 marks]

Each metre is 100 cm.

$3 \times 100 = 300$.

Answer: 300 cm

4. A jug has 5 equal gaps from 0 mL to 500 mL. Find the size of one gap. [2 marks]

$500 \div 5 = 100$.

Answer: 100 mL

5. A pencil begins at 2 cm and ends at 14 cm on a ruler. Find its length. [2 marks]

Subtract the starting reading: $14 - 2 = 12$ cm.

Answer: 12 cm

6. A ruler has marks every 1 cm. Lee reports an exact length of 7.438 cm after only reading that ruler. Explain the problem. [3 marks]

Its marks show whole centimetres.

Extra decimal digits do not make the measurement more accurate.

Answer: The ruler does not show thousandths of a centimetre, so it cannot support that exact reading.