Practical measurement

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

1. Choose the most suitable unit for a school oval's length: millimetres, metres or kilometres. [1 mark]

The length is large enough for metres but much less than a kilometre.

Answer: Metres.

2. A pencil begins at 1.5 cm and ends at 16 cm. Find its length. [1 mark]

$16 - 1.5 = 14.5.$

Answer: 14.5 cm.

3. A rectangular mat is 3 m by 2 m. Find its area. [1 mark]

$3 \times 2 = 6.$

Answer: 6 square metres.

4. A 2-metre ribbon is cut into eight equal pieces. Find each length in centimetres. [2 marks]

$2\,\text{m} = 200\,\text{cm};\ 200 \div 8 = 25.$

Answer: 25 cm.

5. A board is 100 cm by 60 cm. Square stickers have sides of 10 cm and cover it without gaps. How many stickers fit? [2 marks]

$100 \div 10 = 10$ across and $60 \div 10 = 6$ down; $10 \times 6 = 60.$

Answer: 60 stickers.

6. A room width is recorded as 420 m. Suggest a likely unit correction and explain why it is plausible. [2 marks]

A normal room is a few metres wide, not hundreds of metres. The actual unit must be checked rather than silently changed.

Answer: 420 cm, or 4.2 m, is plausible.