Deriving rectangle area

6 questions | 8 marks

Equivalent correct methods earn the corresponding marks.

1. Find the area of a 7 cm by 4 cm rectangle. [1 mark]

$7 \times 4 = 28.$

Answer: 28 square centimetres.

2. Find the area of a 12 m by 3 m rectangle. [1 mark]

$12 \times 3 = 36.$

Answer: 36 square metres.

3. Find the area of a square with side 9 cm. [1 mark]

$9 \times 9 = 81.$

Answer: 81 square centimetres.

4. A grid has 5 rows and 8 columns of one-centimetre squares. Find its area. [1 mark]

$5 \times 8 = 40.$

Answer: 40 square centimetres.

5. A rectangle is 1 m long and 30 cm wide. Find its area in square centimetres. [2 marks]

$1\,\text{m} = 100\,\text{cm};\ 100 \times 30 = 3,000.$

Answer: 3,000 square centimetres.

6. A 6 cm by 4 cm rectangle has perimeter 20 cm. Is its area also 20 square centimetres? Explain. [2 marks]

$\text{Area} = 6 \times 4 = 24;\ \text{perimeter} = 6 + 4 + 6 + 4 = 20.$

Answer: No. Its area is 24 square centimetres.