Perimeter, Area and Volume

Grade 3 · 6 questions · step-by-step answers at the end

Name: Date: Score: / 6

USEFUL EQUATIONS

$P = 2 \times (\text{length} + \text{width})$ $A = \text{length} \times \text{width}$ $A = (1/2) \times \text{base} \times \text{height}$

$V = \text{length} \times \text{width} \times \text{height}$

Questions

Show your working in the space under each question.

1. EASY A square has sides of 6 cm. Find its perimeter and area.

2. EASY A rectangle has perimeter 30 cm and length 9 cm. Find its width.

3. MEDIUM Find the area of a triangle with base 10 cm and height 6 cm.

4. MEDIUM A shape is made from a 6 cm by 4 cm rectangle joined to a 3 cm by 2 cm rectangle. Find its area.

5. HARD How many 1 cm cubes fill a box that is 5 cm by 4 cm by 2 cm?

6. HARD A floor is 4 m by 3 m. How many square tiles of side 0.5 m are needed to cover it?

Step-by-step answers

Perimeter, Area and Volume

1. Perimeter $4 \times 6 = \mathbf{24\ cm}$. Area $6 \times 6 = \mathbf{36\ cm^2}$.
2. Length + width = 15, so the width is **6 cm**.
3. $(1/2) \times 10 \times 6 = \mathbf{30\ cm^2}$.
4. $24 + 6 = \mathbf{30\ cm^2}$.
5. $5 \times 4 \times 2 = \mathbf{40\ cubes}$.
6. 8 tiles fit along the 4 m side and 6 along the 3 m side: $8 \times 6 = \mathbf{48\ tiles}$.