6 PERIMETER, AREA AND VOLUME
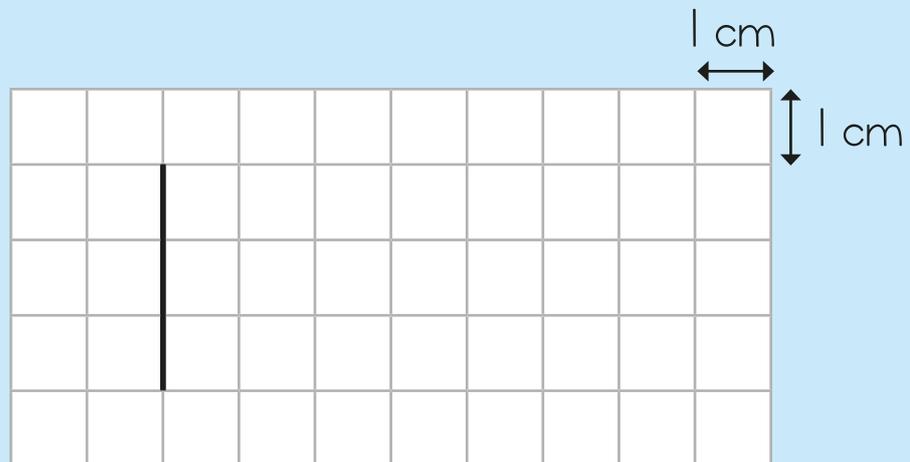
1 A rectangle is drawn on a centimetre square grid.
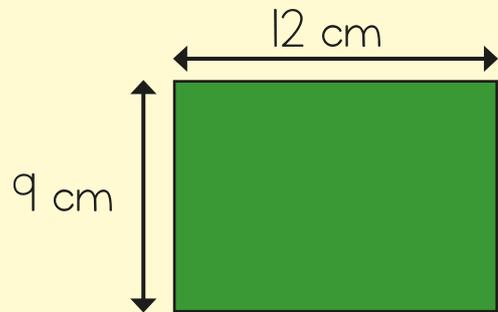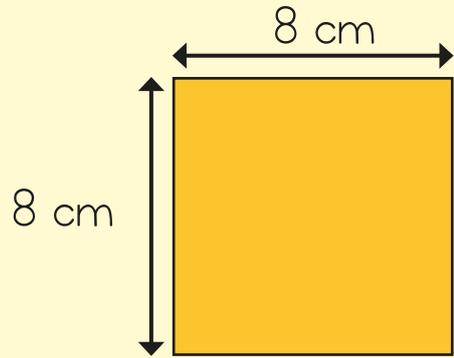
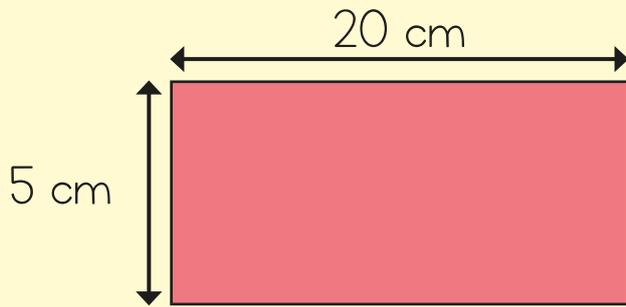1 cm

1 cm
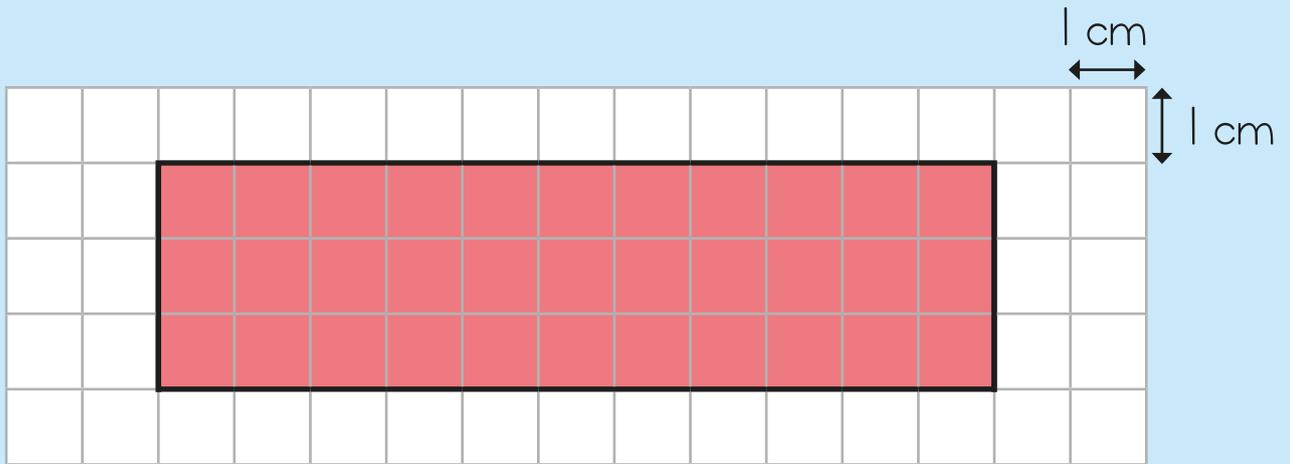
What is the area of the rectangle? ☐ cm²

What is the perimeter of the rectangle? ☐ cm

2 The perimeter of a rectangle is 16 cm.
One of the sides is shown.

1 cm

1 cm

Complete the rectangle.

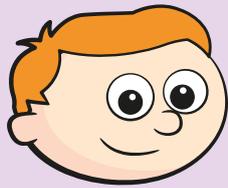**3** Tick the shapes that have an area of 100 cm²

20 cm

5 cm

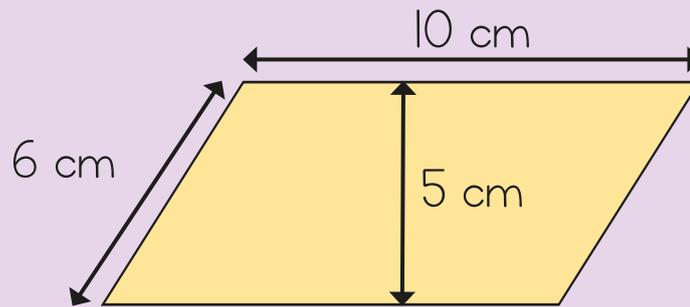8 cm

8 cm

1 m

1 cm

12 cm

9 cm

4 Work out the areas of the triangles.
Give units with your answers.

8 cm

8 cm

4 mm

5 mm
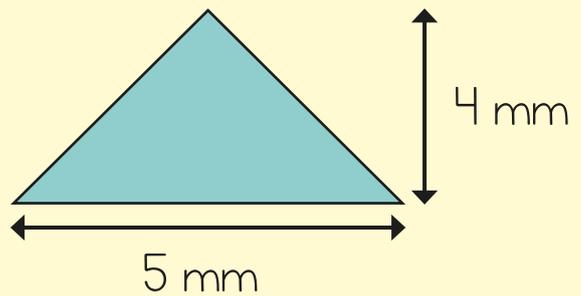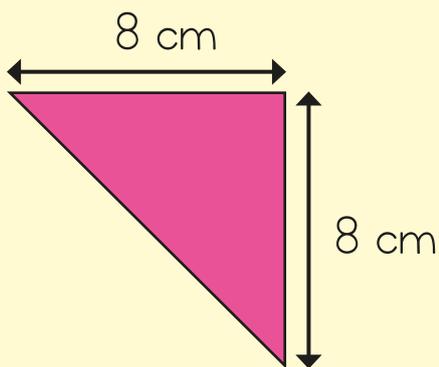
5 Ron is working out the area of the parallelogram.

10 cm

6 cm

5 cm

The area of the parallelogram is 60 cm^2

What mistake has Ron made?
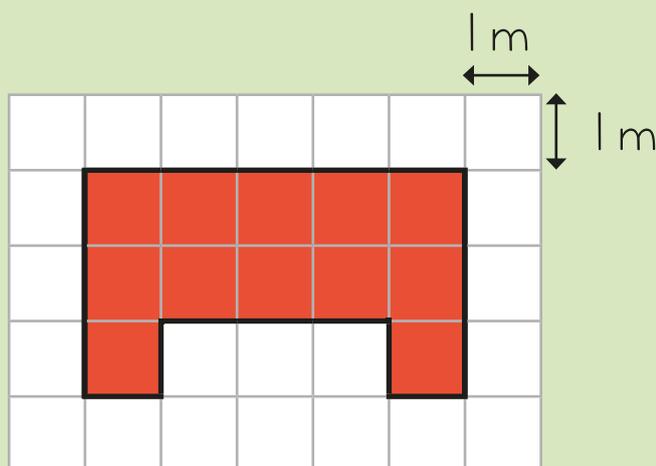
What is the correct area?
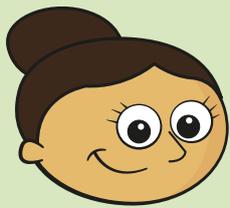
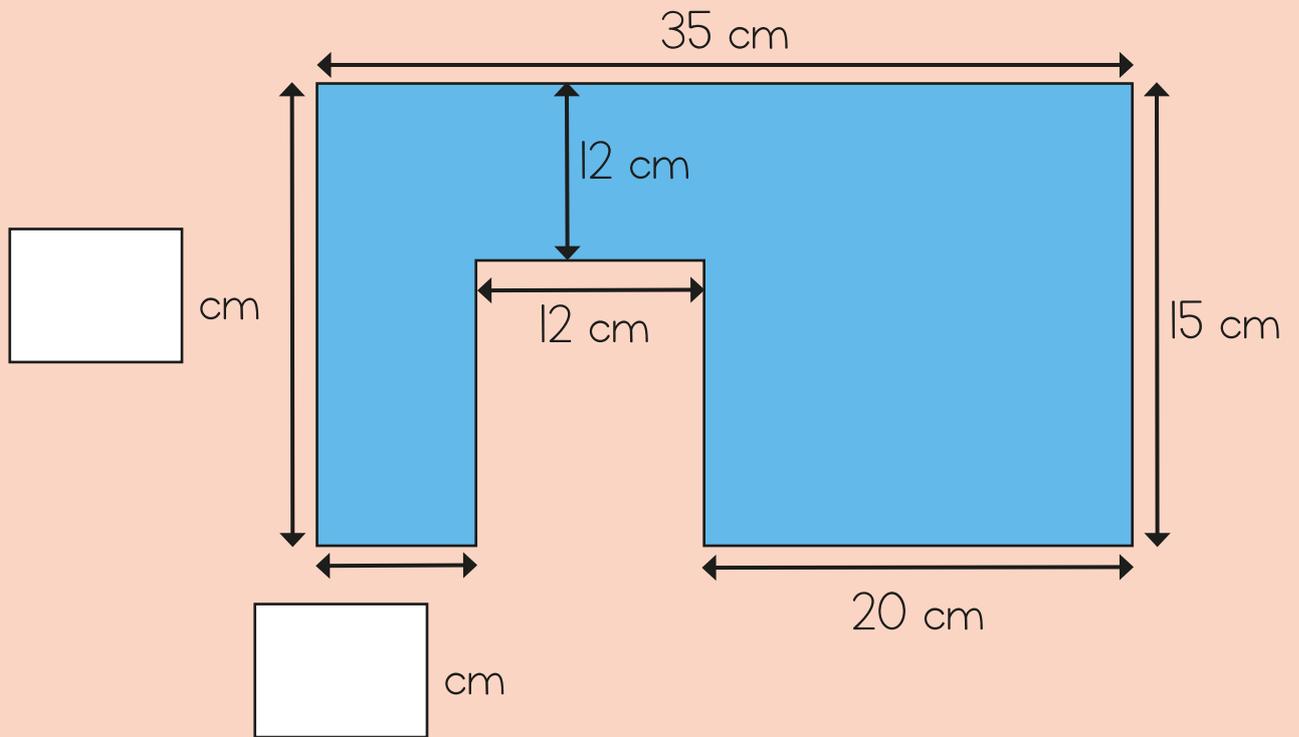**6** Rectangles cannot have the same area and perimeter.

Is Dora correct? Explain your answer.

7 The diagram shows the layout of a garden.
A fence is to be built around the garden.
What is the length of fence needed?
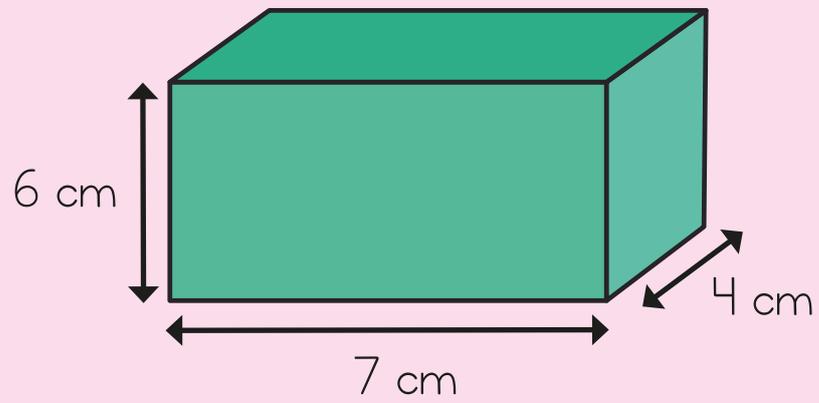

1 m

1 m

m

8 Fill in the missing lengths.

What is the area of the shape?

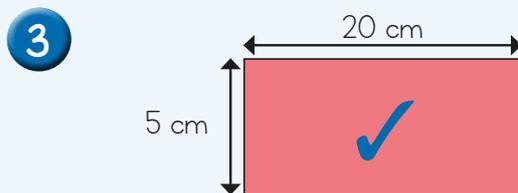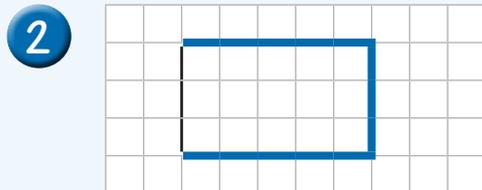Show all your workings.

9 Work out the volume of the cuboid.

6 cm

7 cm

4 cm

Answers

1 33 cm^2 28 cm

2

3

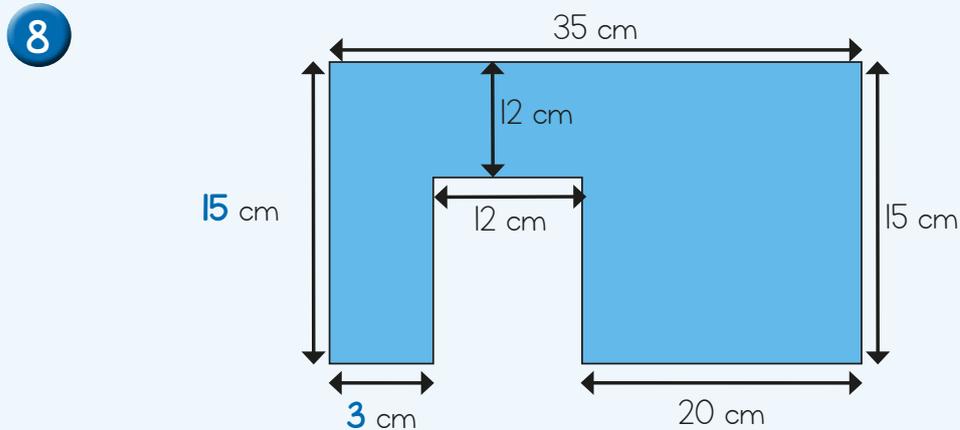20 cm   1 m

5 cm   ✓   1 cm   ✓

4 32 cm^2 10 mm^2

5 He has used 6 cm as the perpendicular height.
50 cm^2

6 Dora is incorrect. Rectangles can sometimes have the same area and perimeter. For example, a 6 by 3 rectangle has an area and a perimeter of 18

7 18 m

8

35 cm

12 cm

12 cm

15 cm   15 cm

3 cm   20 cm

489 cm^2

9 168 cm^3