



The Missing Side



From the video Perimeter 20 cm, length 6 cm $\rightarrow 20 - 6 - 6 = 8$, $8 \div 2 = 4$ cm wide

1 Now it's your turn!

A rectangle has a perimeter of 30 cm and is 9 cm long. How wide is it?



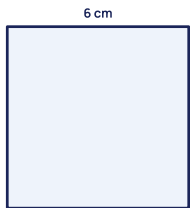
You know two sides: 9 cm and 9 cm. The rest is shared between the other two sides.

$$30 - 9 - 9 = \boxed{} \text{ cm}$$

$$\boxed{} \div 2 = \boxed{} \text{ cm}$$

3 Perimeter of the square.

A square has sides of 6 cm. What is its perimeter?



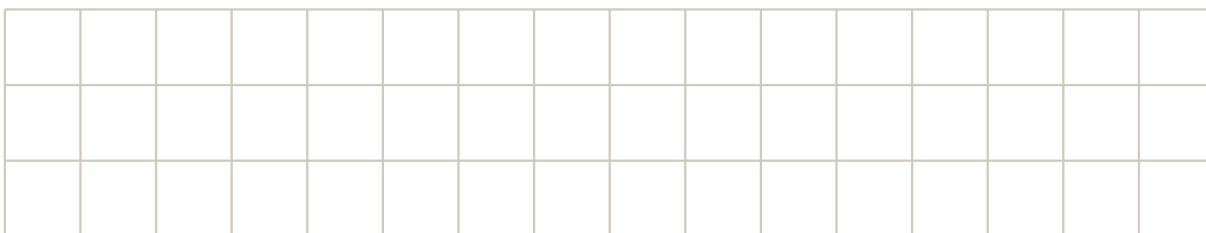
$$4 \times \boxed{} = \boxed{} \text{ cm}$$

5 Think backwards.

A rectangle has a perimeter of 18 cm and is 5 cm long. How wide is it?

$$18 - 5 - 5 = \boxed{} \text{ cm}$$

$$\boxed{} \div 2 = \boxed{} \text{ cm}$$

6 Draw a rectangle with a perimeter of 14 cm on the grid. There are several solutions.**2 Perimeter of the rectangle.**

The rectangle is 5 cm long and 2 cm wide.



$$\boxed{} + \boxed{} + \boxed{} + \boxed{} = \boxed{} \text{ cm}$$

4 Triangles.

a) An equilateral triangle has three sides of 6 cm each. Perimeter?

$$3 \times \boxed{} = \boxed{} \text{ cm}$$

b) A triangle has sides of 7 cm, 4 cm and 6 cm. Perimeter?

$$\boxed{} + \boxed{} + \boxed{} = \boxed{} \text{ cm}$$

★ Brain teaser

A rectangle has a perimeter of 30 cm and is twice as long as it is wide. How long and how wide is it?



The Missing Side

**1 Now it's your turn!**

$$30 - 9 - 9 = 12, 12 \div 2 = 6 \text{ cm}$$

Check: $9 + 6 + 9 + 6 = 30 \text{ cm}$

2 Perimeter of the rectangle.

$$5 + 2 + 5 + 2 = 14 \text{ cm}$$

3 Perimeter of the square.

$$4 \times 6 = 24 \text{ cm}$$

4 Triangles.

$$3 \times 6 = 18 \text{ cm}$$

$$7 + 4 + 6 = 17 \text{ cm}$$

5 Think backwards.

$$18 - 5 - 5 = 8, 8 \div 2 = 4 \text{ cm}$$

★ Brain teaser

Width 5 cm, length 10 cm. Check: $10 + 5 + 10 + 5 = 30 \text{ cm}$.

Perimeter = 6 times the width, so width = perimeter $\div$ 6.

6 Rectangles with a perimeter of 14 cm.

1 cm and 6 cm 2 cm and 5 cm 3 cm and 4 cm

Length + width must always make 7 cm.

For parents and teachers: This worksheet goes with the video "The Missing Side" (Math Story 83, Grade 4). Perimeter means once around the outside. For a rectangle: two lengths and two widths, for a square: four equal sides.

More Math Stories with video and worksheet: www.mathapex.app/en/math-stories/