LO: To be able to find the perimeter.

Today we are going to begin looking at finding the perimeter of shapes.

WARM UP!

2cm = ____ mm

100 cm = ____ m

150 cm = ____ m

60 mm = ____ cm

44 mm = ____ cm

8 cm = ____ mm

500 cm = ____ m

350 cm = ____ m

80 mm = ____ cm

51 mm = ____ cm

Today Year 3 children will find the perimeter using given lengths and Year 4 children will find the area of a rectangle.

What is <u>perimeter</u>?

Recap,
If I had measured each side of this shape and written down the lengths. How would I find the perimeter?

6cm

3cm

3cm

6cm

Recap,
If I had measured each side of this shape and written down the lengths. How would I find the perimeter?

6cm

3cm   18cm   3cm

6cm

Method 1:
Addition
6 + 3 + 6 + 3 = 18cm

Method 2:
Multiplication
6 x 2 = 12
3 x 2 = 6   (12 + 6 = 18cm)

Your turn,
Look at the shapes below. Can you use both methods to work out the perimeter?

4cm

11cm

5cm

11cm

9cm   9cm

6cm
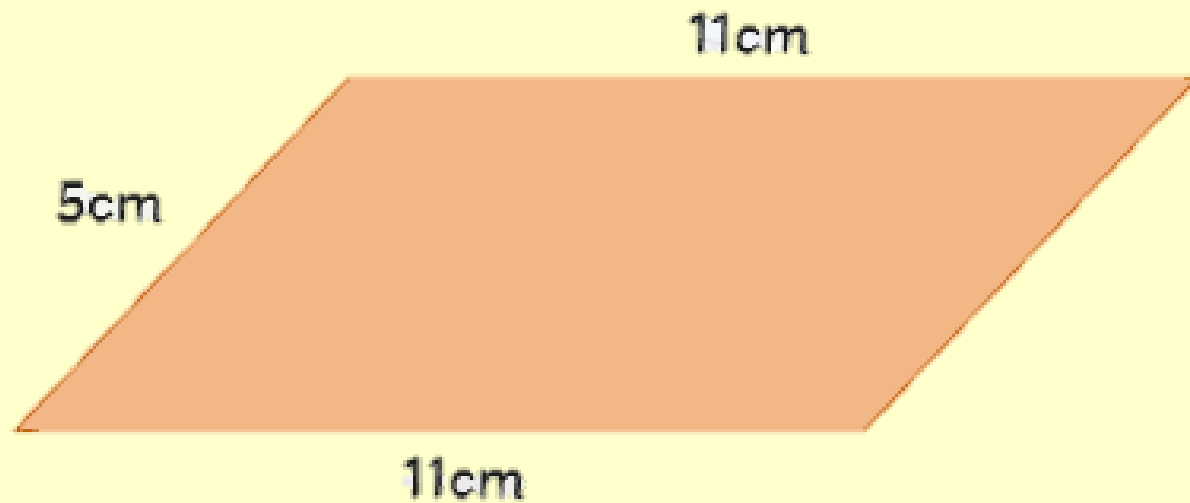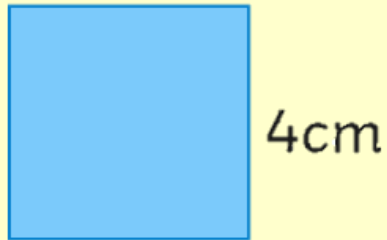
Your turn,
Look at the shapes below. Can you use both methods to work out the perimeter?

Were you correct?
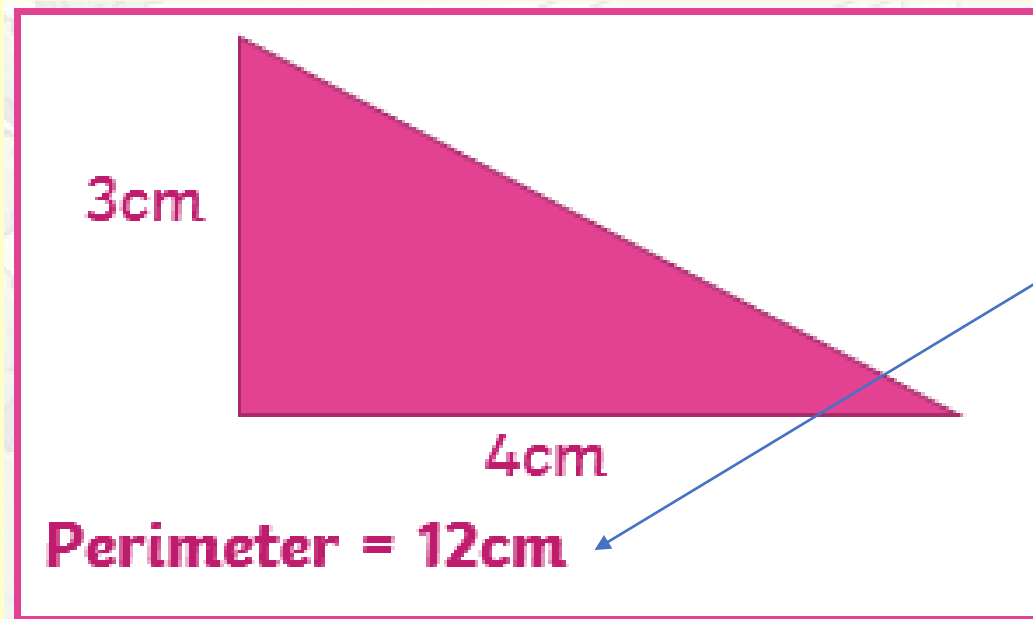
16cm 4cm

11cm

5cm

32cm

11cm

9cm 9cm

24cm

6cm

How would you use the perimeter of the shape to find the missing length?

3cm

4cm

Perimeter = 12cm

How would you use the perimeter of the shape to find the missing length?

3cm

4cm
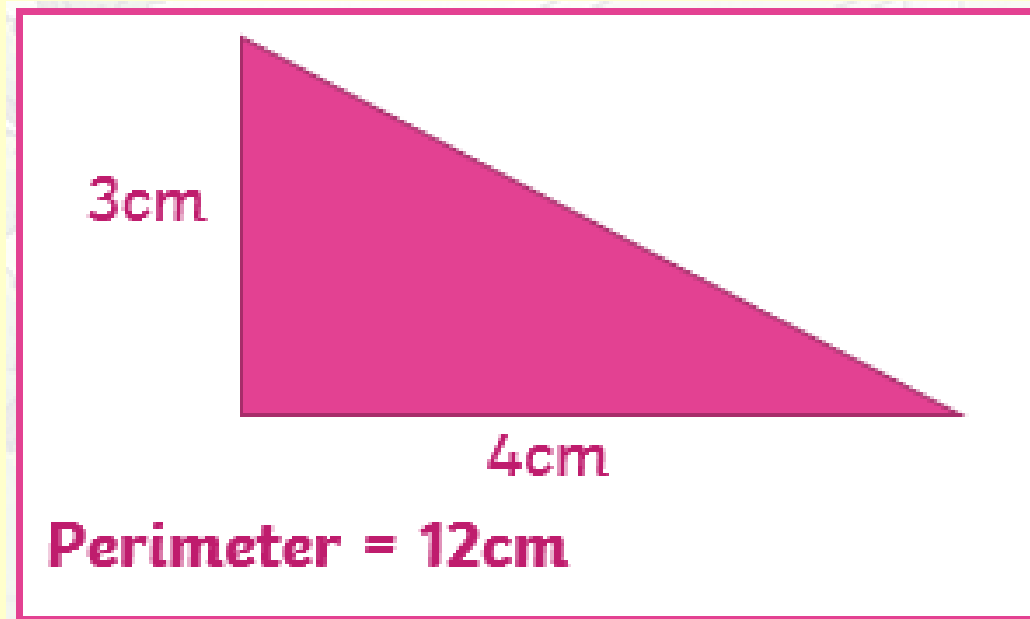
Perimeter = 12cm

12cm – 3cm – 4cm =
12cm – 7cm =
5cm

Your turn,
Find the missing lengths using the perimeter.

7cm

6cm

6cm

7cm

Perimeter = 28cm

8cm

8cm

Perimeter = 26cm

4cm

Perimeter = 12cm

Your turn,
Find the missing lengths using the perimeter.

7cm

6cm

2cm

6cm

7cm

Perimeter = 28cm

5cm

8cm

8cm

5cm

Perimeter = 26cm

4cm

2cm

2cm

4cm
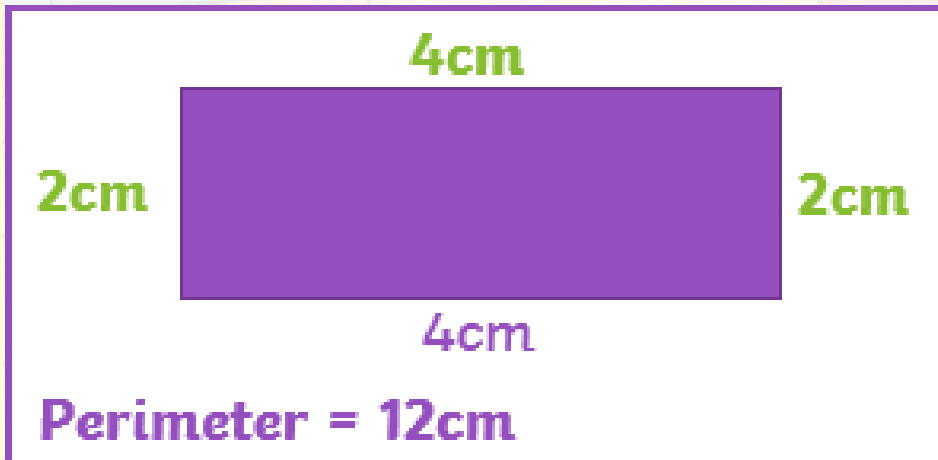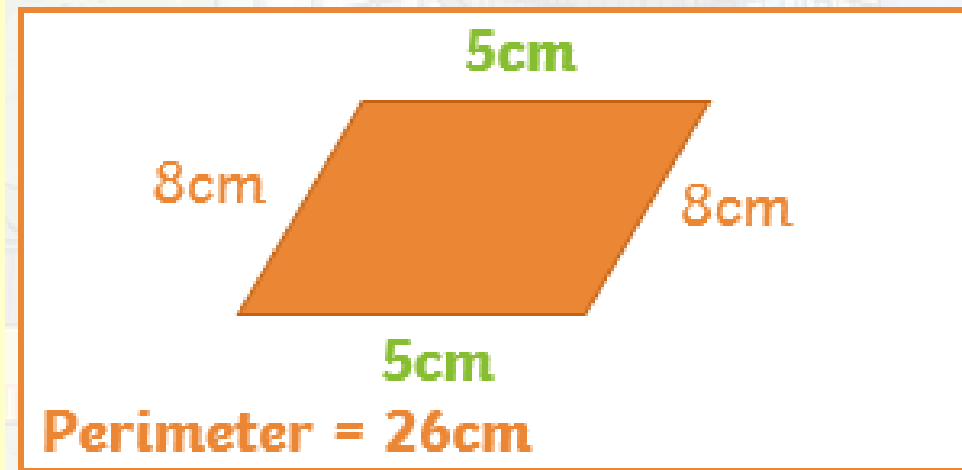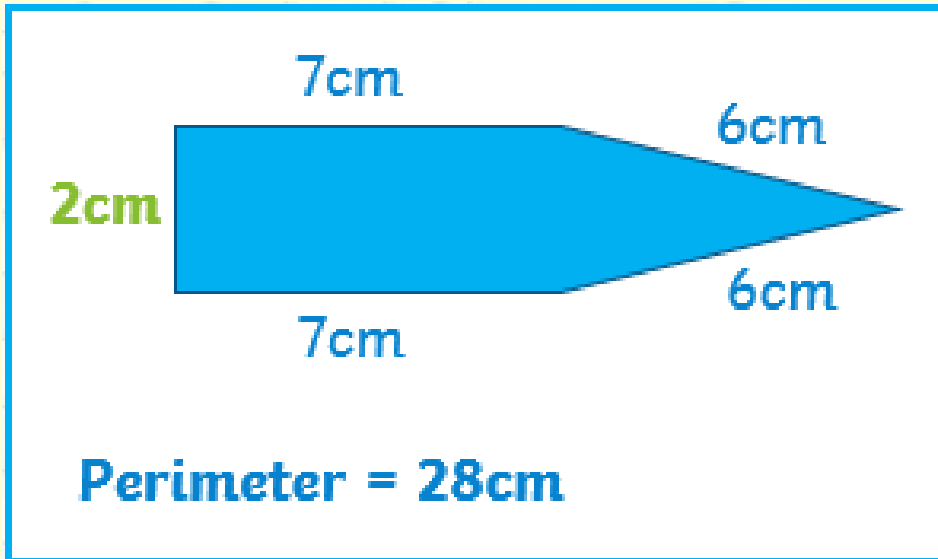
Perimeter = 12cm

Were you correct?

Year 3 children can now start their worksheet.

Year 4 children you need to work out the perimeter of rectangles today.

You learn in Year 3 to add each of the sides together or sometimes use multiplication then add.
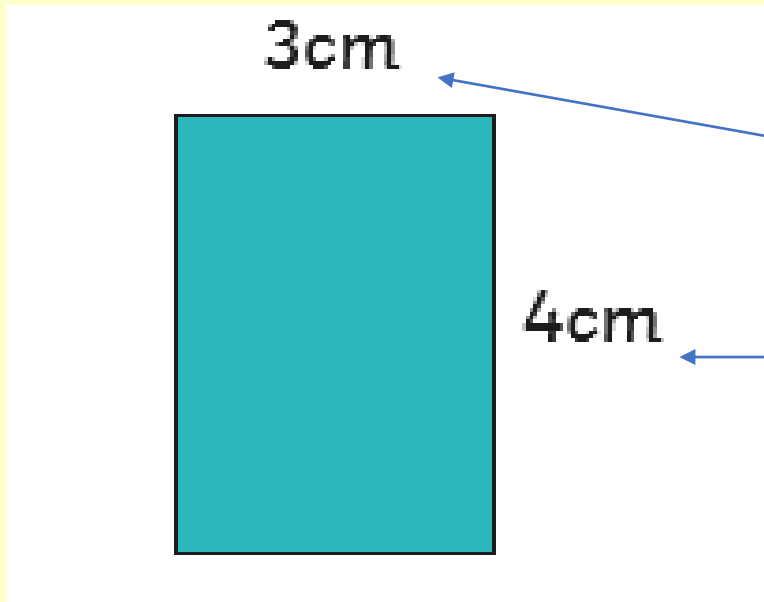
In Year 4 you need to learn a different strategy ready for moving on.

To find the perimeter, you could do...

4 + 3 + 4 + 3 = 14cm   or...   **4 x 2 + 3 x 2 = 14cm**

3cm

4cm

To work out perimeters of <u>rectangles</u> we can use the formula

2 x width + length

Add the sides together → 7cm
Then times by 2 → 14cm

Your turn,

Use this method to work out the perimeter...
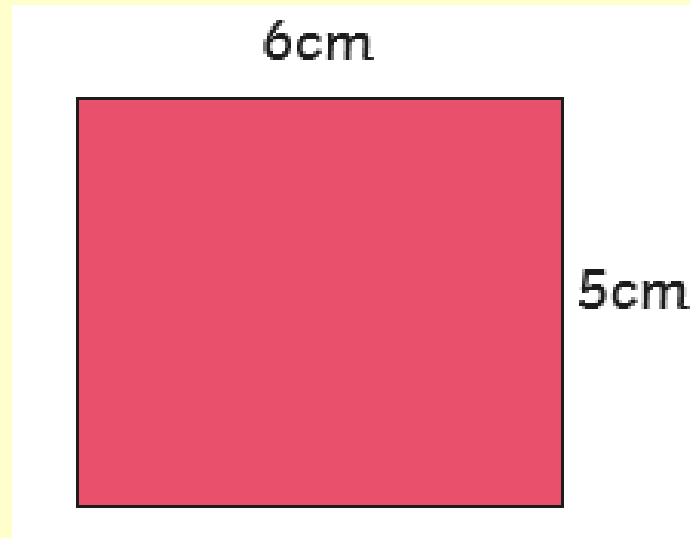
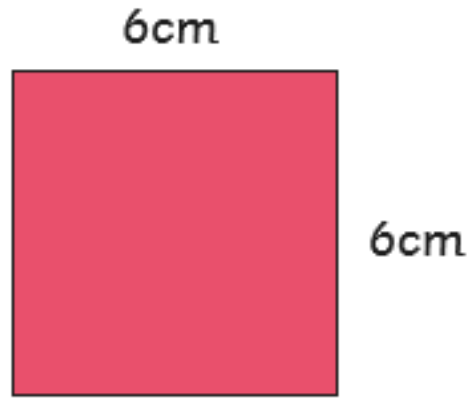**Your turn,**

Use this method to work out the perimeter…

6cm

5cm
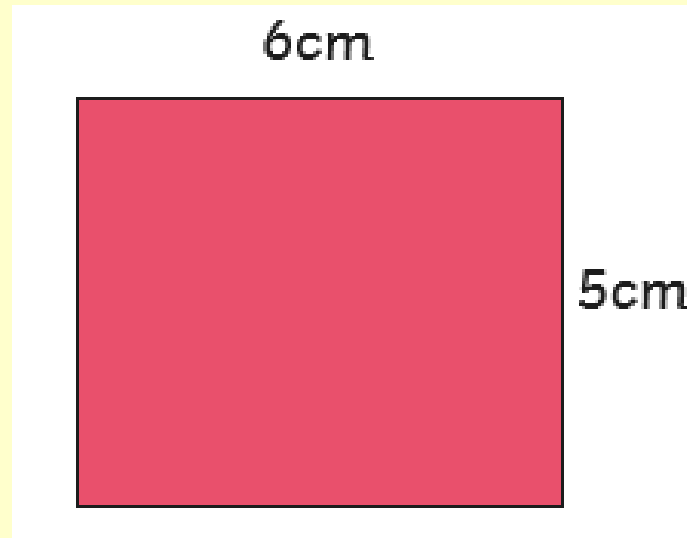
6cm + 5cm = 11cm
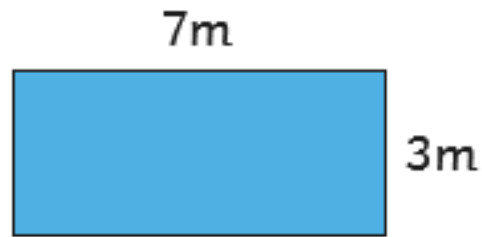11cm × 2 = 22cm

Challenge:

Look at these calculations. Which are correct? Can you explain why? Can you explain the mistakes and find the correct answers?

6cm

6cm

6cm × 4 = 24cm

7m

3m

7cm + 3cm = 10cm
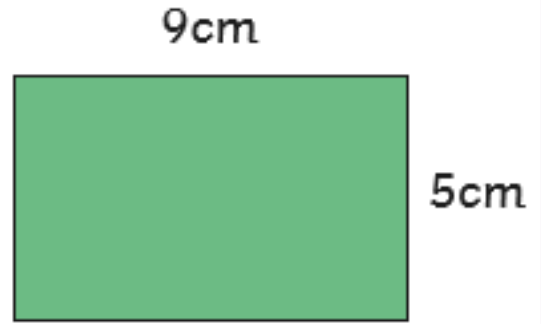10cm × 2 = 20cm

9cm

5cm

9cm + 5cm = 14cm

Well done! Now start your worksheet!

Look at these calculations. Which are correct? Can you explain why? Can you explain the mistakes and find the correct answers?
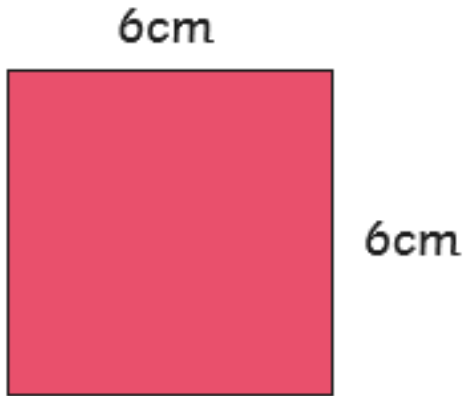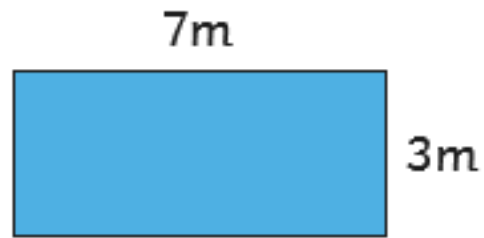
Shape 1 (square):
- 6cm (top)
- 6cm (side)

6cm × 4 = 24cm

Shape 2 (rectangle):
- 7m (top)
- 3m (side)

7cm + 3cm = 10cm
10cm × 2 = 20cm

Shape 3 (rectangle):
- 9cm (top)
- 5cm (side)

9cm + 5cm = 14cm

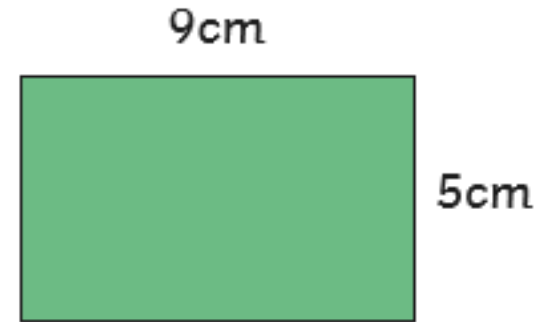
This is correct. As the shape is a square, the perimeter can be calculated by multiplying the length of one side by four.

The incorrect units have been used – the measurements should be in metres.

The sum of the sides has not been doubled. The correct answer should be 28cm.