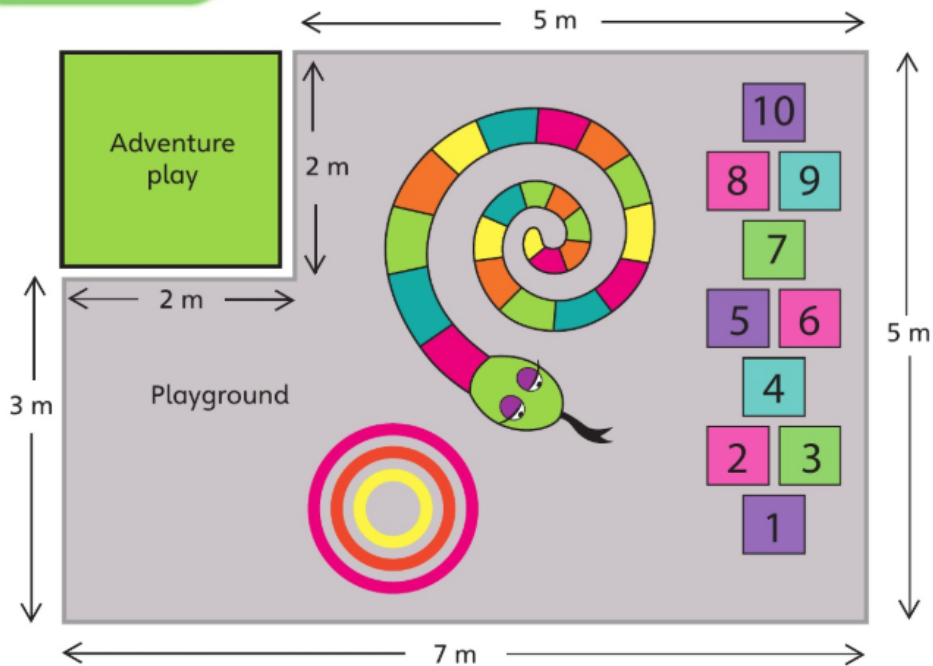


Measuring the perimeter 2

Discover



- 1** a) The school is putting a new fence around the playground.
How much fence does the school need to buy?
- b) Amelia runs twice around the outside of the playground.
How many metres does she run?

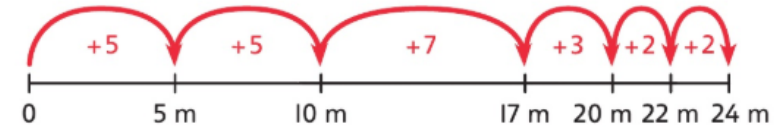
Share

- a) To work out how much fence is needed, first work out the perimeter.

There must be a way to work out the perimeter without measuring.



I remember! If I add the sides together I will find the perimeter. The playground has side lengths of 5 m, 5 m, 7 m, 3 m, 2 m and 2 m.



$$5\text{ m} + 5\text{ m} + 7\text{ m} + 3\text{ m} + 2\text{ m} + 2\text{ m} = 24\text{ m}$$

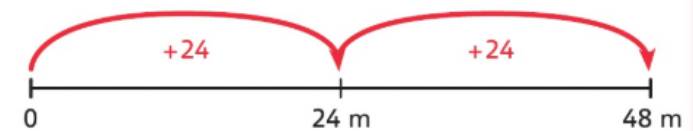
I wonder if there is a quicker way to add these numbers up.



The perimeter of the playground is 24 metres.
The school will need to buy 24 metres of fence.

- b) Amelia runs around the perimeter of the playground twice.

$$\begin{array}{r} \text{T O} \\ 24 \\ + 24 \\ \hline 48 \end{array}$$



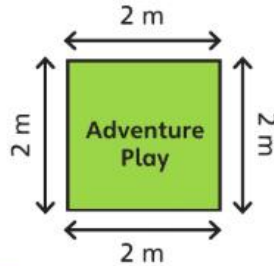
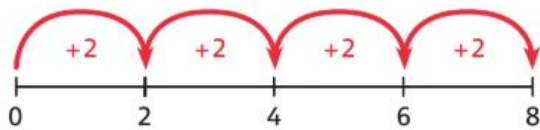
Amelia runs 48 metres.

Think together

- 1 What is the perimeter of the school's adventure play area?

The adventure play area has four sides that are each 2 m long.

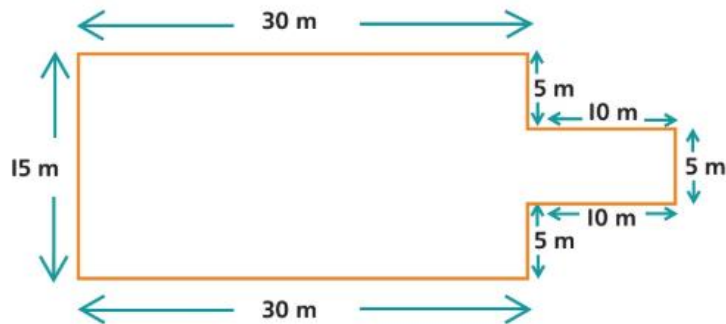
$$2\text{ m} + 2\text{ m} + 2\text{ m} + 2\text{ m} = \square\text{ m}$$



The perimeter of the adventure play area is metres.

- 2 Children run around the perimeter of the school playing field three times.

How many metres do they run?



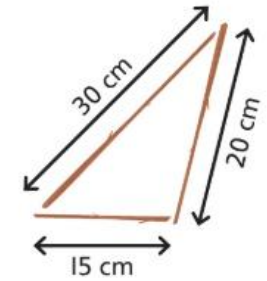
The perimeter of the playing field is metres.

The children run metres.

- 3 Reena makes this shape out of sticks.

What is its perimeter?

The perimeter of Reena's shape is cm.



- 4 The school's nature area has four sides and a perimeter of 18 m.

Lexi has measured one side of the nature area. It is 6 m long.

Zac has measured another side of the nature area. It is 4 m long.

What could the other side lengths be?

I will start by working out how many metres the other two sides added together must be.

I wonder if the nature area is a rectangle.



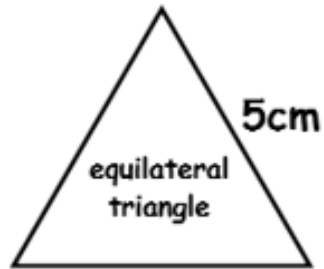
The other side lengths could be m and m.



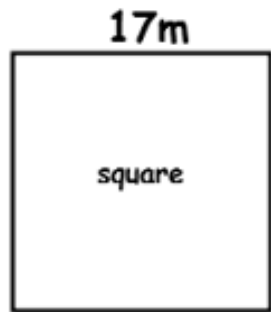
Work out the perimeter of each shape.



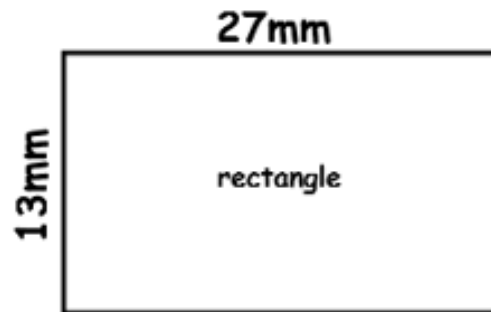
Perimeter = _____



Perimeter = _____



Perimeter = _____



Perimeter = _____