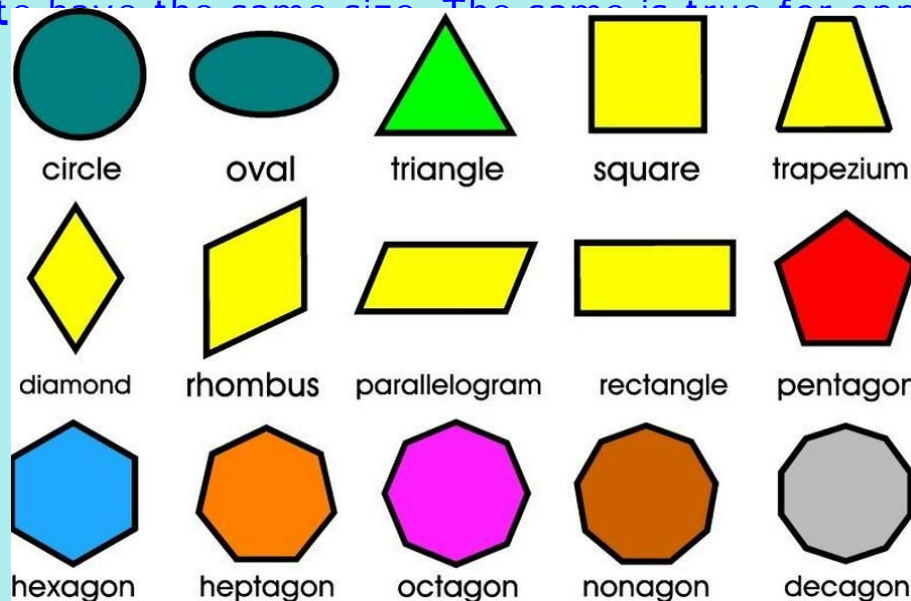


I can measure & calculate the perimeter of complex shapes.

What shape am I?

1. I have eight vertices and eight equal sides and angles.
2. I have four vertices and four equal angles, opposite sides are of equal length.
3. I have 3 sides that are all of different length and 3 internal angles of different size.
4. I have four vertices and sides. My inner angles that are opposite have the same size. The same is true for opposite sides.

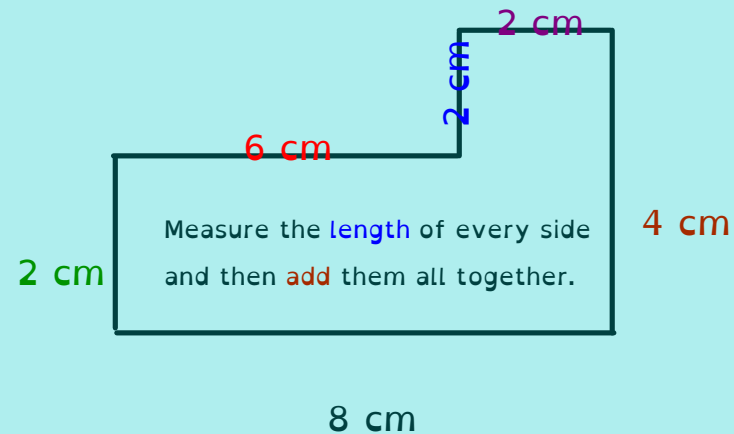


Extension: Make a "Guess who I am" game and share it on Class-Dojo.

I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes:

Method 1

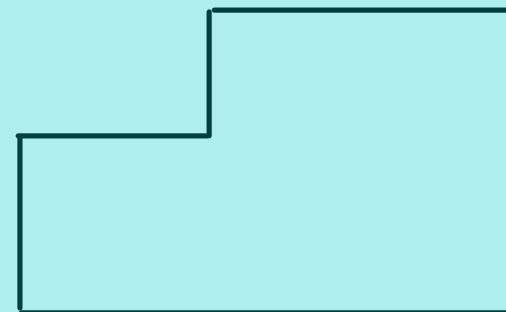


$$P = 8\text{cm} + 4\text{cm} + 2\text{cm} + 2\text{cm} + 6\text{cm} + 2\text{cm} = 24\text{cm}$$

Task: Calculate the perimeter.

Measure the length and width.
Add them together and then double them.

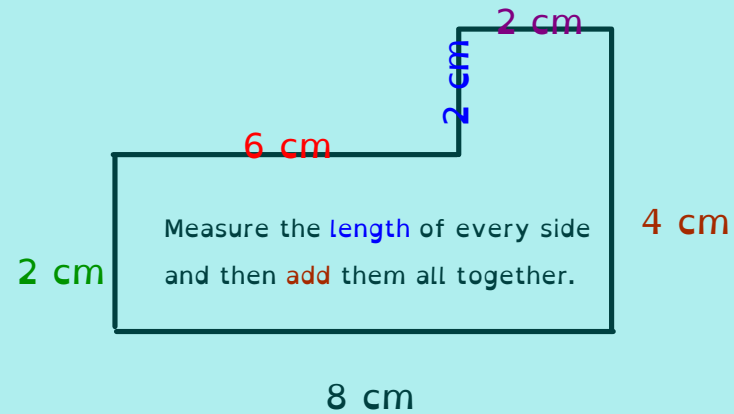
length



I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes:

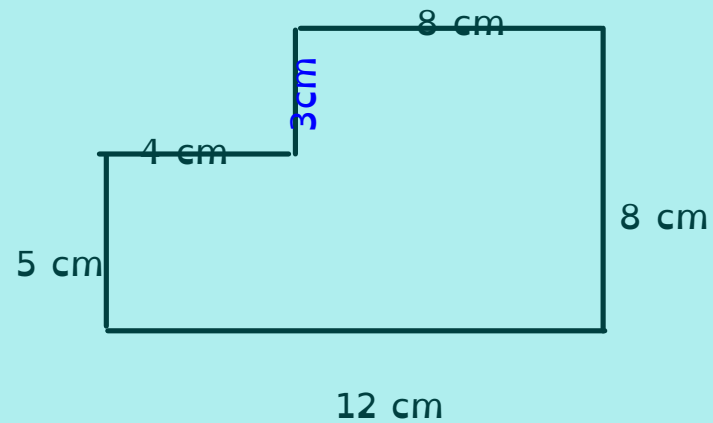
Method 1



$$P = 8\text{cm} + 4\text{cm} + 2\text{cm} + 2\text{cm} + 6\text{cm} + 2\text{cm} = 24\text{cm}$$

Fluency

Task: Calculate the perimeter.

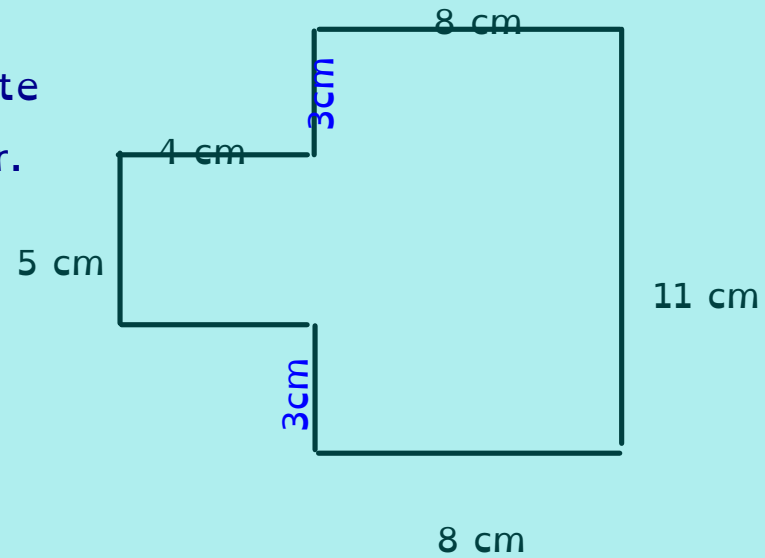


I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes: Method 1

Fluency

Task: Calculate
the perimeter.



I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes:

Method II

quick

easy

powerful when some
sides are unknown.

2 cm

2 cm

You would have to first find the
missing lengths before calculating.

4 cm



8 cm

8 cm

4 cm

2 cm

2 cm

Treat it like a normal
rectangle.

4 cm

8 cm

$$P = 2 \times (8\text{cm} + 4\text{cm}) = 2 \times 12\text{cm} = \underline{24\text{cm}}$$

I can calculate the perimeter of complex shapes.

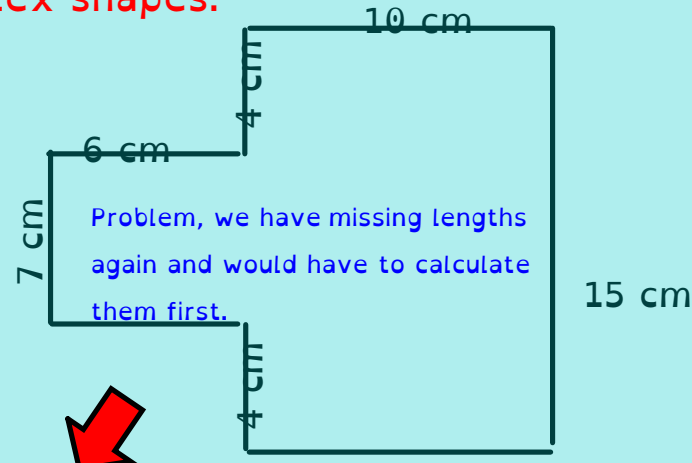
Perimeter of (regular) complex shapes:

Method II

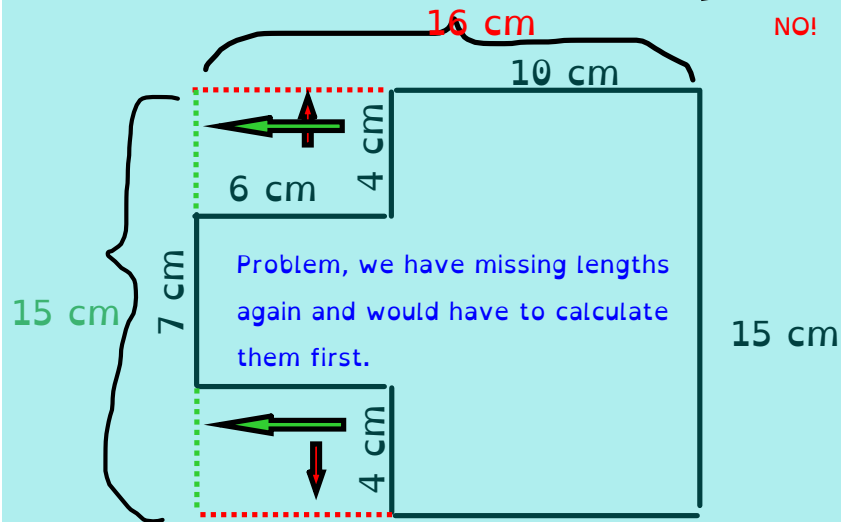
quick

easy

powerful when some sides are unknown.



NO!



Now, you can treat it like a normal rectangle.

$$P = 2 \times (16\text{cm} + 15\text{cm})$$

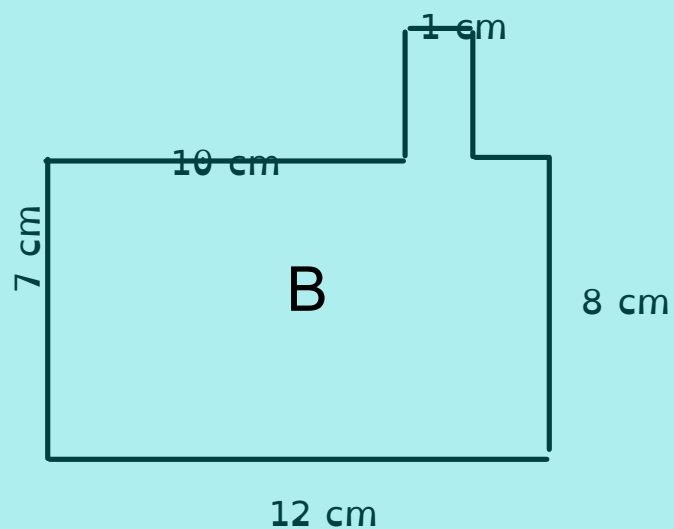
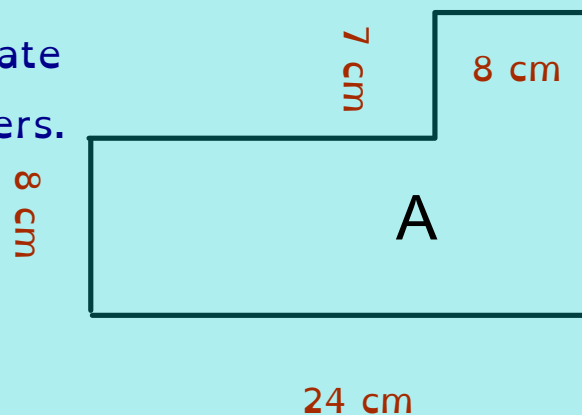
$$P = 2 \times 31\text{cm} = 62\text{cm}$$

I can calculate the perimeter of complex shapes.

Fluency

Perimeter of (regular) complex shapes: Method II

Task: Calculate the perimeters.

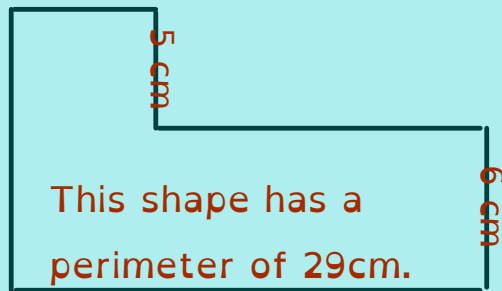


I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes: Method I and II

Reasoning

True or false?
 Explain how you know.
 Explain the mistake.

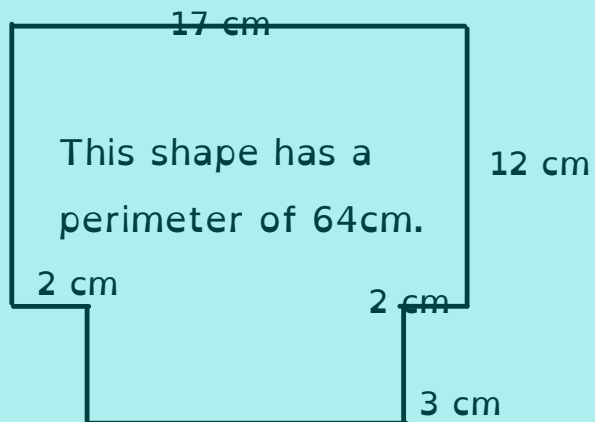


18 cm

Sentence-Stems:

The perimeter the shape is ..., because ...

Keywords: measure, perimeter, sides, opposite, angles, complex, area, ruler, measuring tape, metre stick, millimetre, centimetre, metre, kilometre, length, width, ...

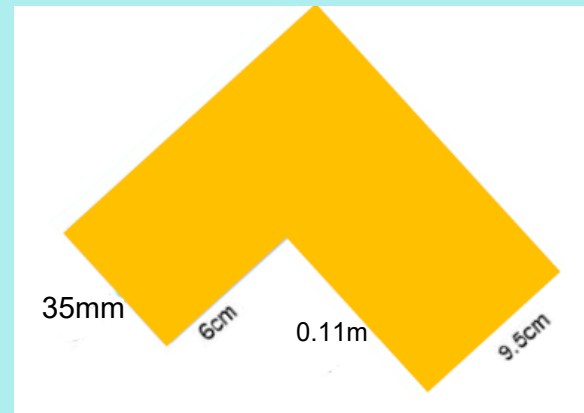


I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes: Method I and II

Reasoning

Why is this
shape's
perimeter a little
trickier to find?



Sentence-Stems:

The perimeter of this shape is a bit more difficult to find, because ...

Therefore, first I need to ..., then I simply ...

The perimeter of the shape is ...

Keywords: measure, perimeter, sides, opposite, angles, complex, area, ruler, measuring tape, metre stick, millimetre, centimetre, metre, kilometre, length, width, ...

10mm = 1 cm 1mm = 0.1cm 100cm = 1m 10cm=0.1m 1cm = 0.01cm

I can calculate the perimeter of complex shapes.

Perimeter of (regular) complex shapes: Method I and II

Problem-Solving

Find 5 or more
different
complex shapes
with a perimeter
of 60cm. Draw
and label them.

Sentence-Stems:

The perimeter the shape is ..., because ...

Keywords: measure, perimeter, sides,
opposite, angles, complex, area, ruler,
measuring tape, metre stick, millimetre,
centimetre, metre, kilometre, length,
width, ...

