

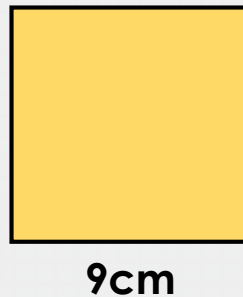
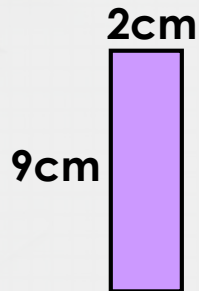
Area and Perimeter

Use what you already know and what we have already covered.

Remember to check the units of measurement and convert where necessary.

Introduction

Match the rectangle to the correct area and perimeter.



55cm^2

81cm^2

18cm^2

22cm

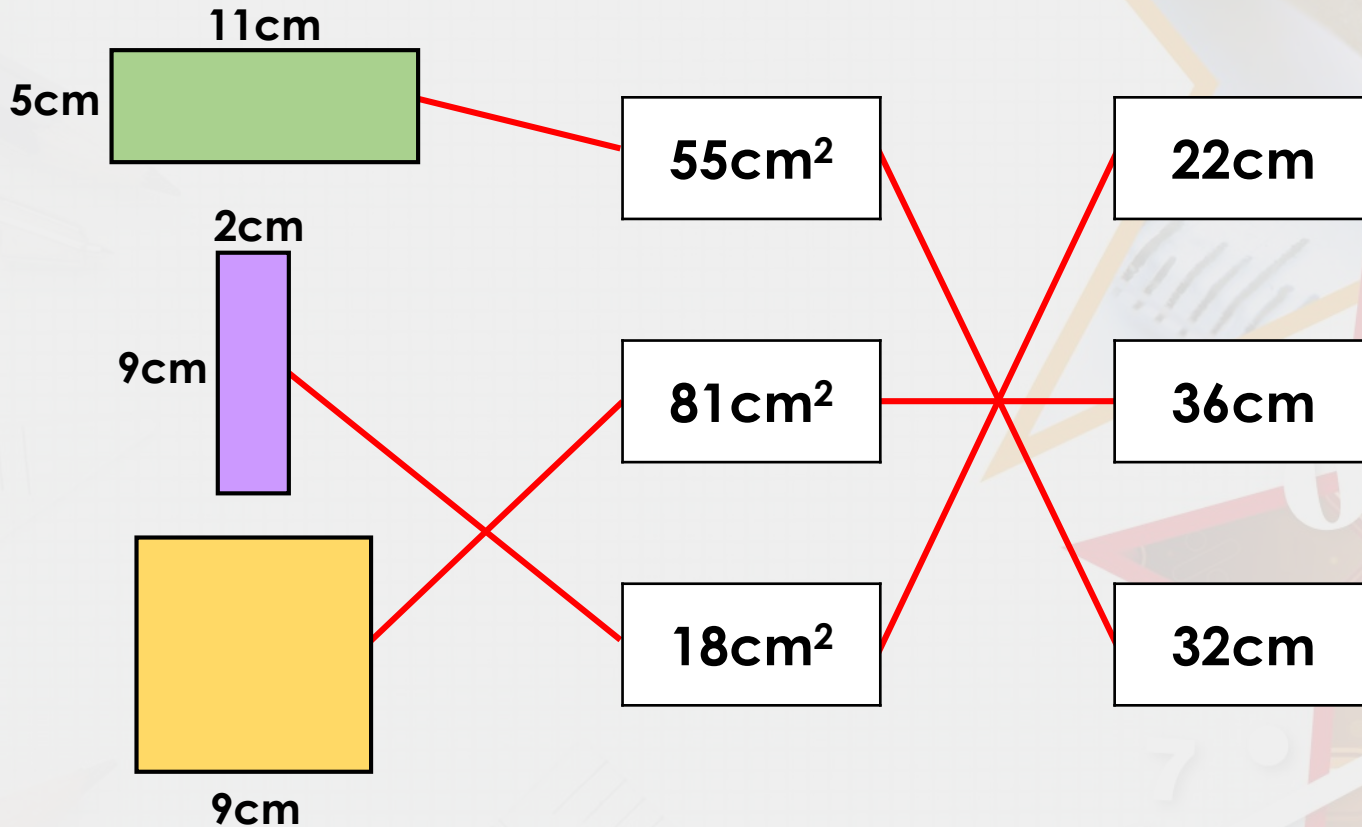
36cm

32cm

Not to scale

Introduction

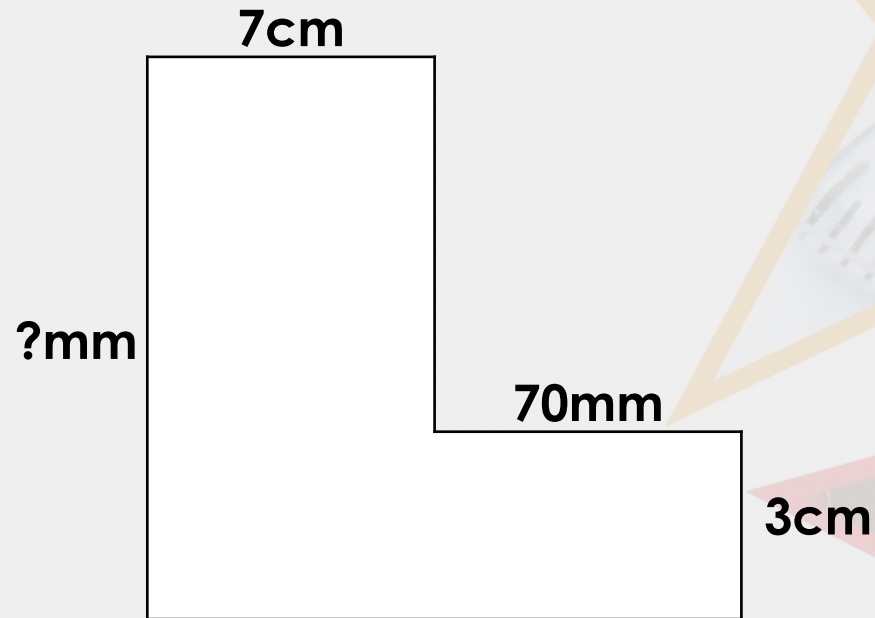
Match the rectangle to the correct area and perimeter.



Not to scale

Varied Fluency 1

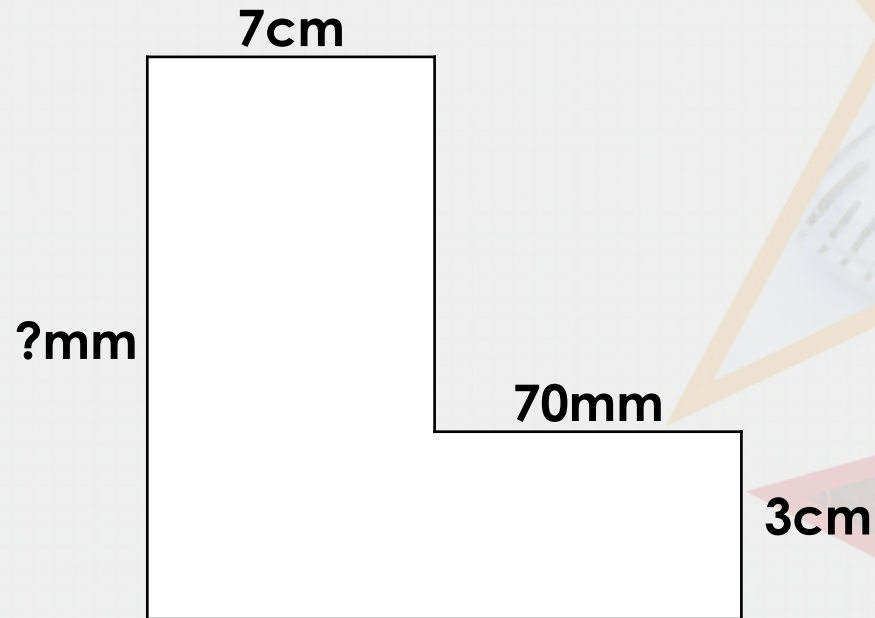
The area of this shape is 112cm^2 .
Work out the missing width.



Not to scale

Varied Fluency 1

The area of this shape is 112cm^2 .
Work out the missing width.



130mm

Not to scale

Varied Fluency 2

Solve the word problem.

A room measures 16ft by 6ft. What is the area of the room?

Use the formula $a = w \times l$ to write your answer.

Varied Fluency 2

Solve the word problem.

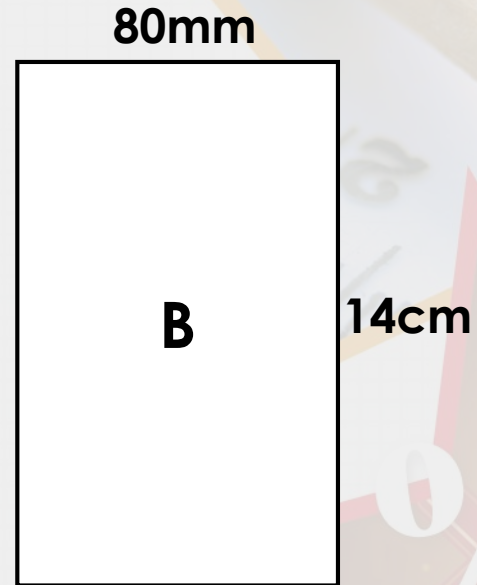
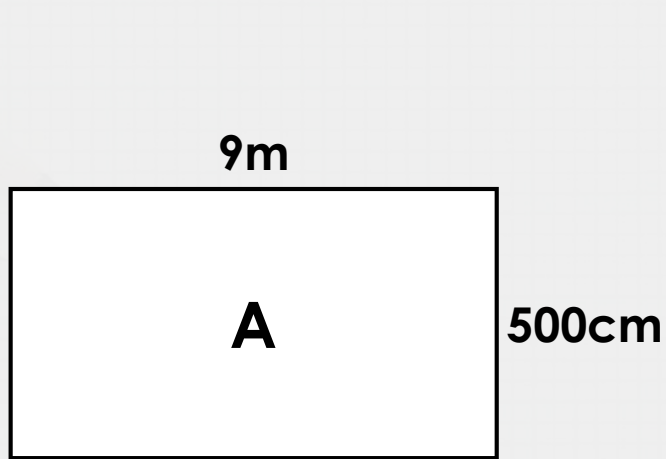
A room measures 16ft by 6ft. What is the area of the room?

Use the formula $a = w \times l$ to write your answer.

$$\text{Area} = 16\text{ft} \times 6\text{ft} = 96\text{ft}^2$$

Varied Fluency 3

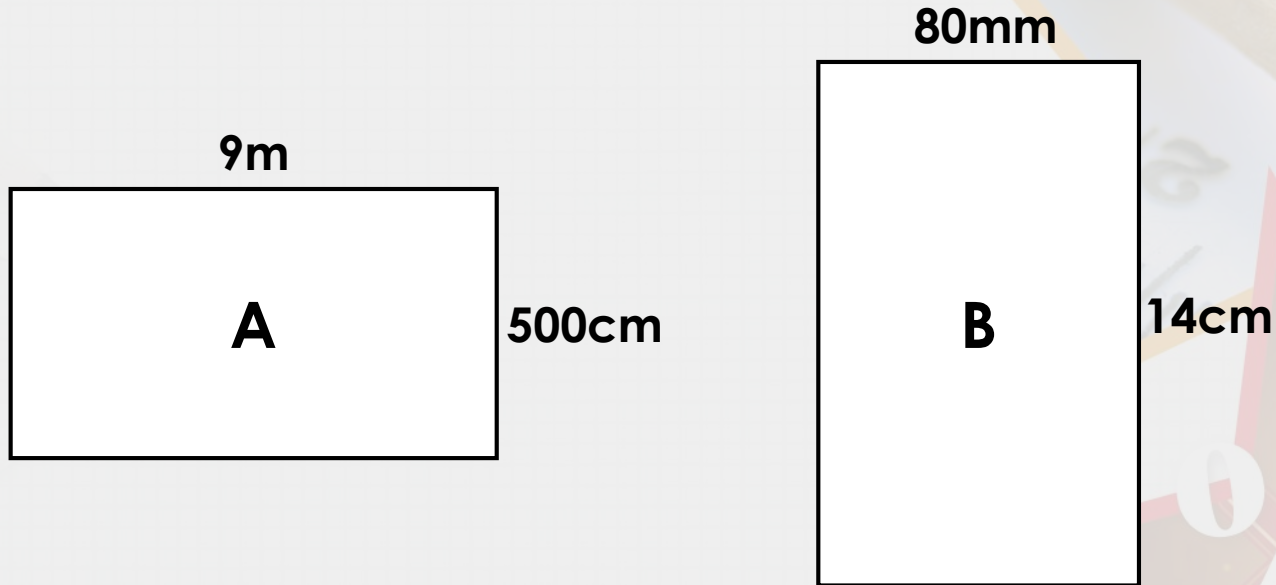
Using the correct formulae, calculate the area and the perimeter of the shapes below.



Not to scale

Varied Fluency 3

Using the correct formulae, calculate the area and the perimeter of the shapes below.



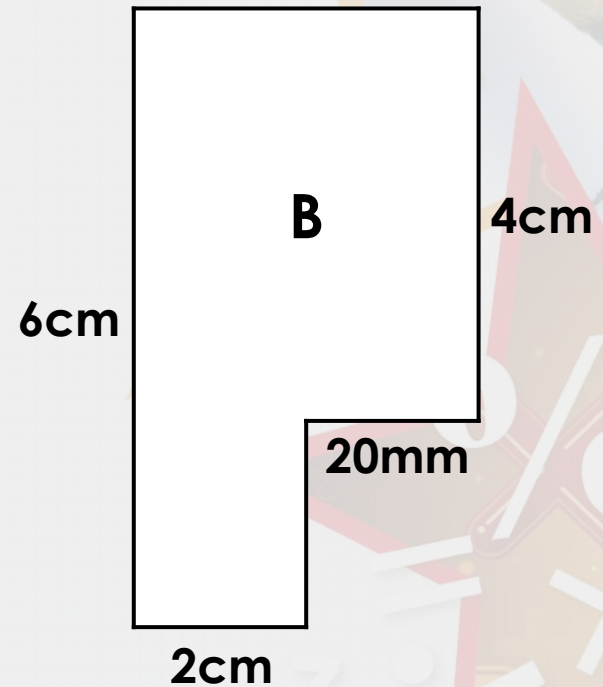
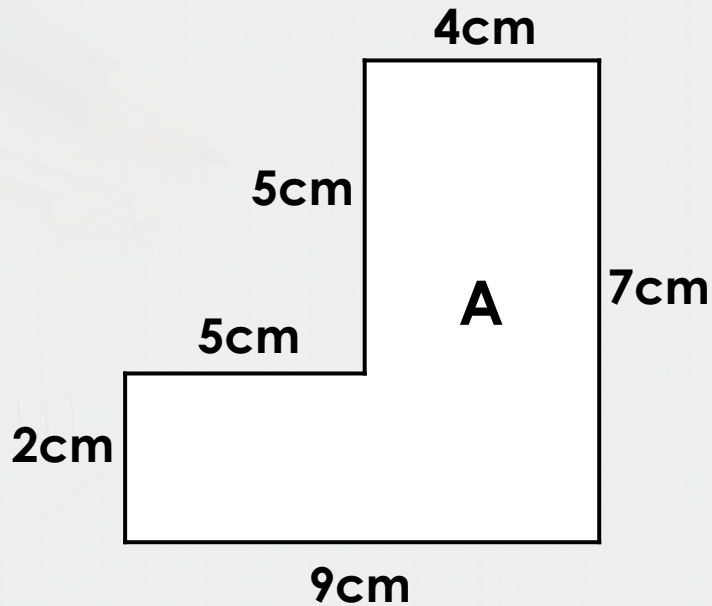
A. Area = $9\text{m} \times 5\text{m} = \underline{45\text{m}^2}$, Perimeter = $9\text{m} + 9\text{m} + 5\text{m} + 5\text{m} = \underline{28\text{m}}$

B. Area = $14\text{cm} \times 8\text{cm} = \underline{112\text{cm}^2}$, Perimeter = $14\text{cm} + 14\text{cm} + 8\text{cm} + 8\text{cm} = \underline{44\text{cm}}$

Not to scale

Varied Fluency 4

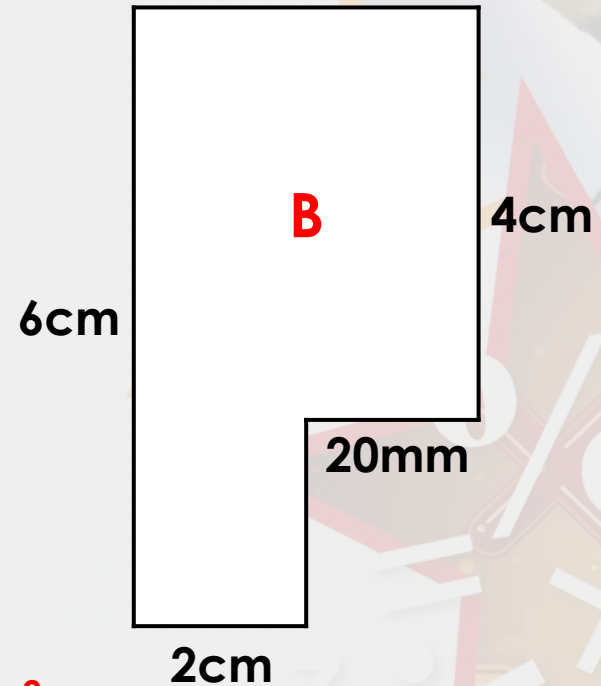
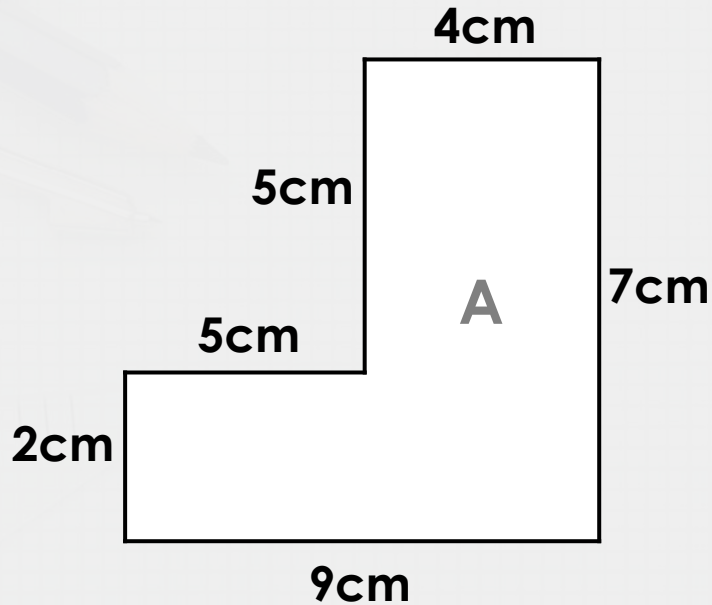
Which shape has an area and a perimeter that equal the same number?



Not to scale

Varied Fluency 4

Which shape has an area and a perimeter that equal the same number?



B
Area = 20cm²
Perimeter = 20cm

Not to scale

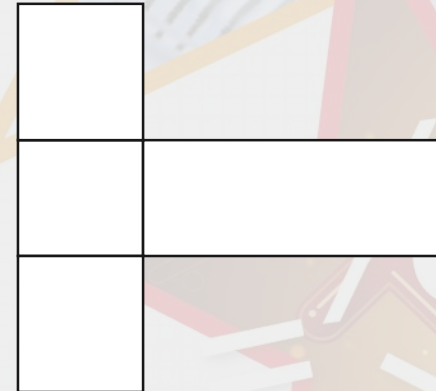
Problem Solving 1

Drew draws two equal rectangles.



He puts them together to make a new shape.

Using the correct formulae, find the area and perimeter of the new shape.



Not to scale

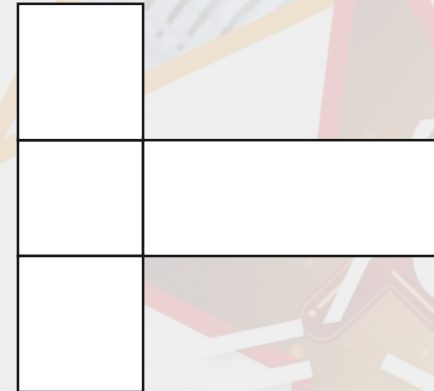
Problem Solving 1

Drew draws two equal rectangles.



He puts them together to make a new shape.

Using the correct formulae, find the area and perimeter of the new shape.



Area = 57cm^2
Perimeter = 44cm

Not to scale

Problem Solving 2

A shape has a perimeter of 54cm.

**Perimeter =
54cm**

What is the largest area the shape could have?

What is the smallest area the shape could have?

Not to scale

Problem Solving 2

A shape has a perimeter of 54cm.

Perimeter =
54cm

What is the largest area the shape could have?

$$13\text{cm} \times 14\text{cm} = 182\text{cm}^2$$

What is the smallest area the shape could have?

$$26\text{cm} \times 1\text{cm} = 26\text{cm}^2$$

Not to scale

Reasoning 1

Milly says,



The same formula can be used to calculate area and perimeter.

Do you agree? Prove it.

Reasoning 1

Milly says,



The same formula can be used to calculate area and perimeter.

Do you agree? Prove it.

Milly is incorrect because...

Reasoning 1

Milly says,



The same formula can be used to calculate area and perimeter.

Do you agree? Prove it.

Milly is incorrect because area is calculated using the formula $a = l \times w$, and perimeter is calculated using the formula $p = 2l + 2w$.