

Varied Fluency

Step 1: Measure Perimeter

National Curriculum Objectives:

Mathematics Year 5: (5M7a) [Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres](#)

Differentiation:

Developing Questions to support measuring perimeter of simple rectilinear shapes in whole centimetres and metres with no conversion of units.

Expected Questions to support measuring perimeter of composite rectilinear shapes in centimetres and metres with no conversion of units.

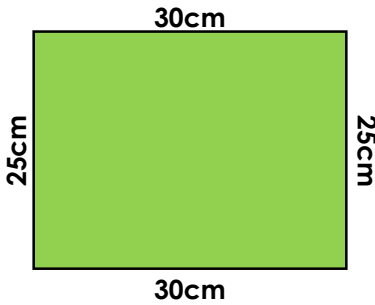
Greater Depth Questions to support measuring perimeter of composite shapes in centimetres and metres with conversion of units.

[More resources](#) which follow the same small steps as White Rose.

Did you like this resource? Don't forget to [review](#) it on our website.

Measure Perimeter

1a. Find the perimeter of this shape.

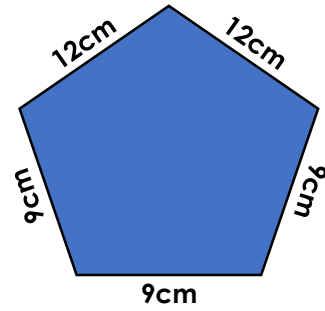


Not to scale

VF

Measure Perimeter

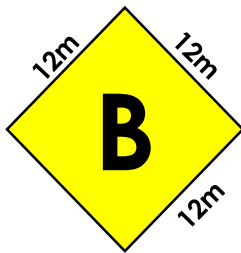
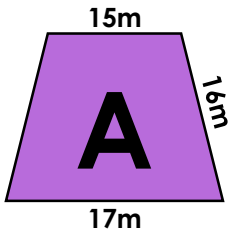
1b. Find the perimeter of this shape.



Not to scale

VF

2a. Match the shape to its perimeter.



64m

48cm

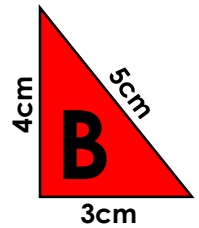
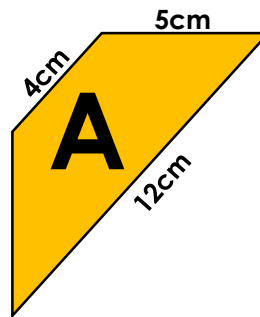
48m



Not to scale

VF

2b. Match the shape to its perimeter.



26m

12cm

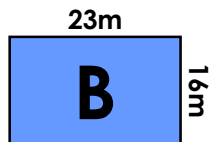
26cm



Not to scale

VF

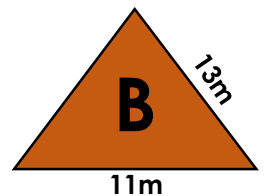
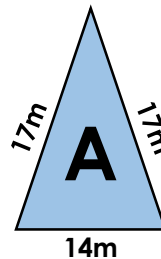
3a. Which shape has the longest perimeter?



Not to scale

VF

3b. Which shape has the longest perimeter?



Not to scale

VF

4a. A shape has three sides of 9cm, and one of 13cm.

What is the perimeter of the shape?



VF

4b. A shape has 7 equal sides of 12cm.

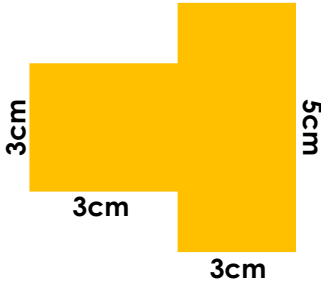
What is the perimeter of the shape?



VF

Measure Perimeter

5a. Find the perimeter of this shape.

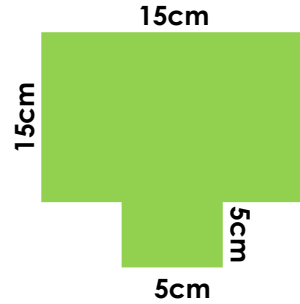


Not to scale

VF

Measure Perimeter

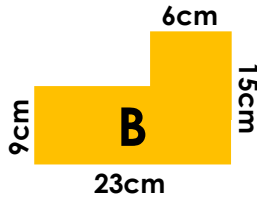
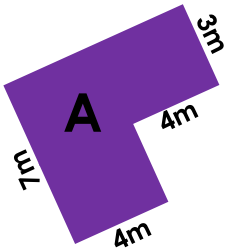
5b. Find the perimeter of this shape.



Not to scale

VF

6a. Match the shape to its perimeter.



30m

48m

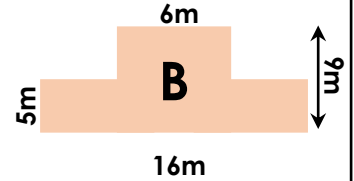
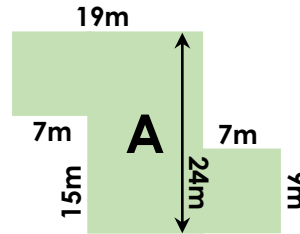
76cm



Not to scale

VF

6b. Match the shape to its perimeter.



70m

100m

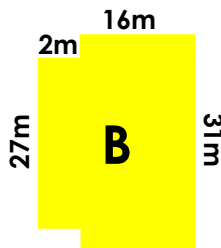
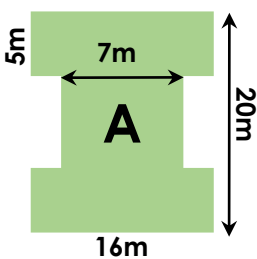
50m



Not to scale

VF

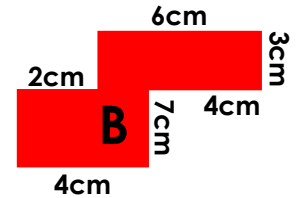
7a. Which shape has the longest perimeter?



Not to scale

VF

7b. Which shape has the longest perimeter?



Not to scale

VF

8a. A shape has three sides of 4m, three sides of 8m and four of 6m.

What is the perimeter of the shape?



VF

8b. A shape has four sides of 7cm, three sides of 8cm and two of 9cm.

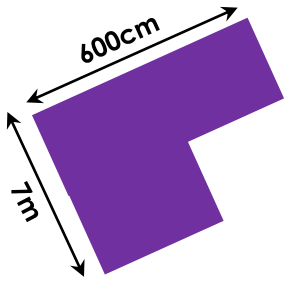
What is the perimeter of the shape?



VF

Measure Perimeter

9a. The length of the longer sides are double the length of the shorter sides. Find the perimeter of the shape.

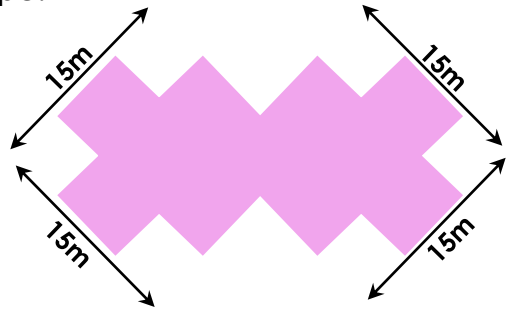


Not to scale

VF

Measure Perimeter

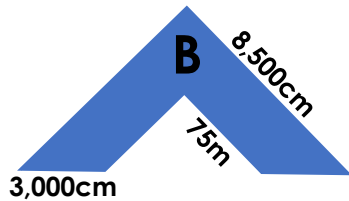
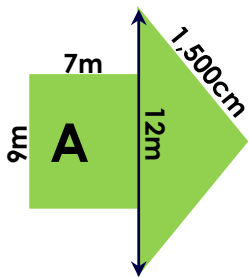
9b. All the sides of the shape below are the same length. Find the perimeter of the shape.



Not to scale

VF

10a. Match the shape to its perimeter.



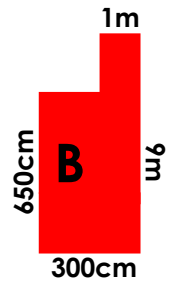
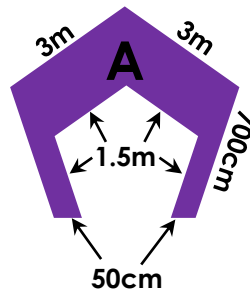
- | | | | |
|-----|-----|-----|------|
| 57m | 97m | 56m | 380m |
|-----|-----|-----|------|



Not to scale

VF

10b. Match the shape to its perimeter.



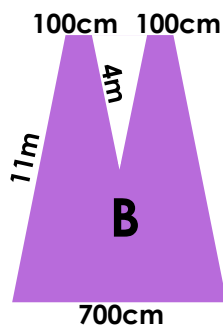
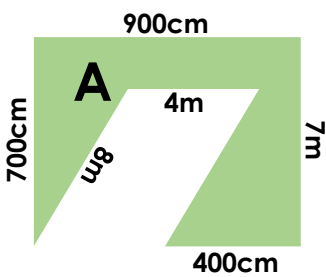
- | | | | |
|-----|------|------|-----|
| 27m | 100m | 120m | 24m |
|-----|------|------|-----|



Not to scale

VF

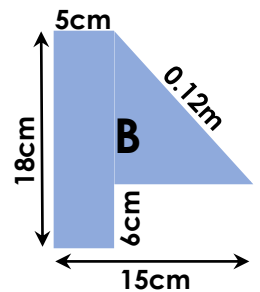
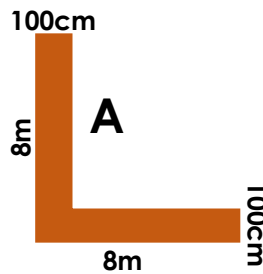
11a. Which shape has the longest perimeter?



Not to scale

VF

11b. Which shape has the longest perimeter?



Not to scale

VF

12a. A shape has five sides of 450cm, six sides of 3m and three of 6m.

What is the perimeter of the shape?



VF

12b. A shape has nine sides of 2m, three sides of 150cm and two of 8m.

What is the perimeter of the shape?



VF

Varied Fluency Measure Perimeter

Developing

- 1a. 110cm
- 2a. $A = 64\text{m}$, $B = 48\text{m}$
- 3a. Shape B: $A = 74\text{m}$, $B = 78\text{m}$
- 4a. 40cm

Expected

- 5a. 22cm
- 6a. $A = 30\text{m}$, $B = 76\text{m}$
- 7a. Shape B: $A = 90\text{m}$, $B = 98\text{m}$
- 8a. 60m

Greater Depth

- 9a. 26m
- 10a. $A = 56\text{m}$, $B = 380\text{m}$
- 11a. Shape A: $A = 47\text{m}$, $B = 39\text{m}$
- 12a. 58.5m or 5,850cm

Varied Fluency Measure Perimeter

Developing

- 1b. 51cm
- 2b. $A = 26\text{cm}$, $B = 12\text{cm}$
- 3b. Shape A: $A = 48\text{m}$, $B = 37\text{m}$
- 4b. 84cm

Expected

- 5b. 70cm
- 6b. $A = 100\text{m}$, $B = 50\text{m}$
- 7b. Shape A: $A = 44\text{cm}$, $B = 36\text{cm}$
- 8b. 70cm

Greater Depth

- 9b. 100m
- 10b. $A = 27\text{m}$, $B = 24\text{m}$
- 11b. Shape B: $A = 38\text{cm}$, $B = 56\text{cm}$
- 12b. 38.5m or 3,850cm