

# Varied Fluency

## Step 4: Perimeter of Rectilinear Shapes

### National Curriculum Objectives:

Mathematics Year 4: (4M7a) [Measure and calculate the perimeter of a rectilinear figure \(including squares\) in centimetres and metres](#)

### Differentiation:

**Developing** Questions to support adding single-digit numbers to calculate the perimeter of simple rectilinear shapes where the measurements of all sides are given and are in cm.

**Expected** Questions to support adding single-digit numbers to calculate the perimeter of rectilinear shapes where not all measurements are given. Measurements are given in cm and mm (no conversion needed).

**Greater Depth** Questions to support adding single and double-digit numbers to calculate the perimeter of more complex rectilinear shapes where not all measurements are given. Measurements are given in cm and mm (conversion needed).

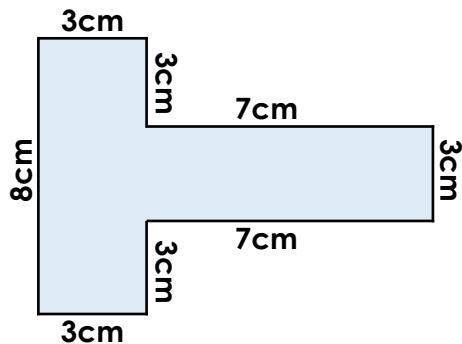
More [Year 4 Length and Perimeter](#) resources.

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

Perimeter of Rectilinear Shapes

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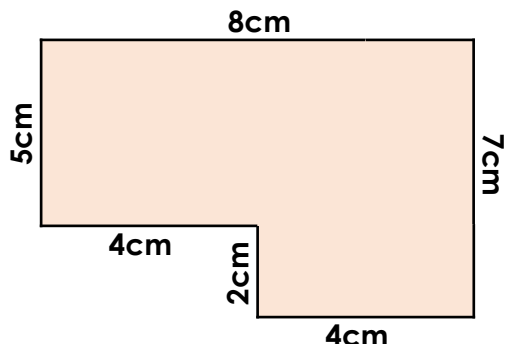
1a. Calculate the perimeter.



Not to scale

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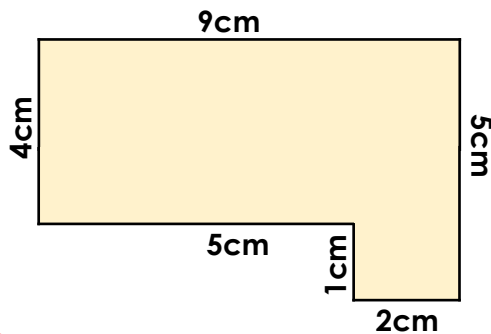
1b. Calculate the perimeter.



Not to scale

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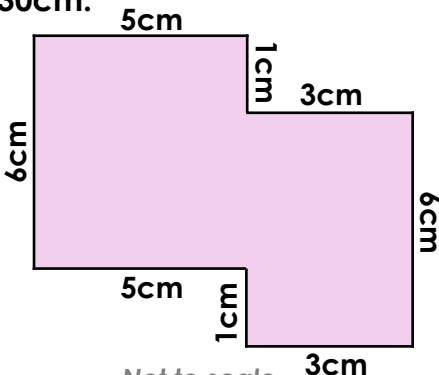
2a. True or false? The perimeter of the shape is 28cm.



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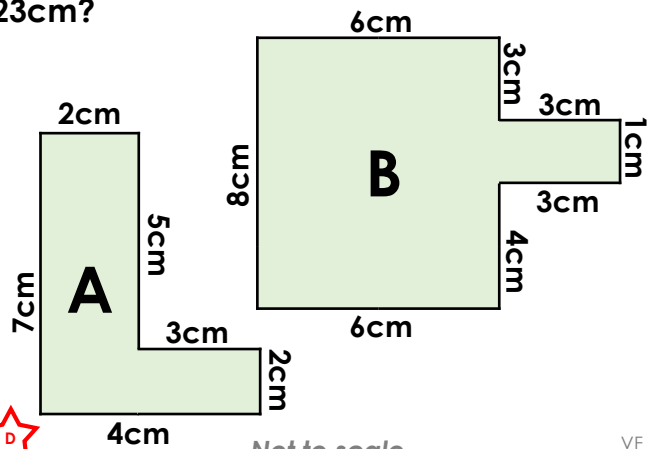
2b. True or false? The perimeter of the shape is 30cm.



Not to scale

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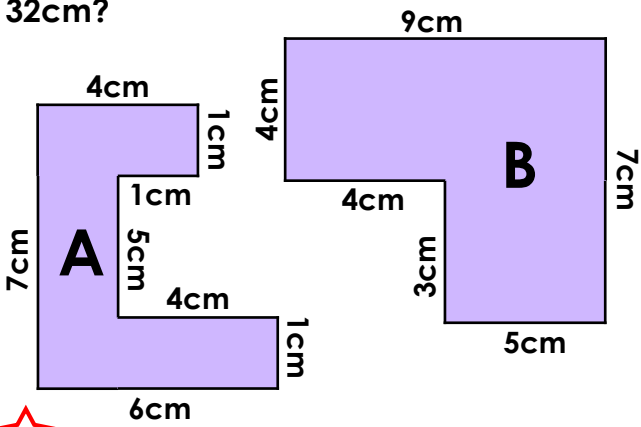
3a. Which shape has a perimeter of 23cm?



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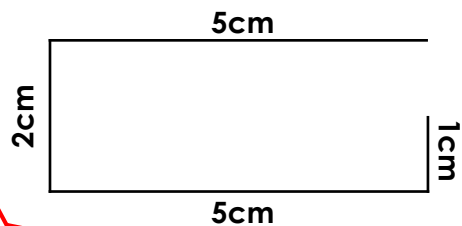
3b. Which shape has a perimeter of 32cm?



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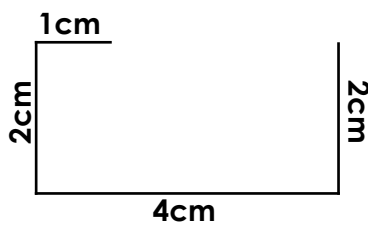
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4a. Complete the rectilinear shape so that it has a perimeter of 20cm.



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4b. Complete the rectilinear shape so that it has a perimeter of 18cm.

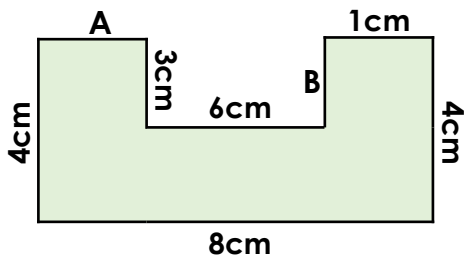


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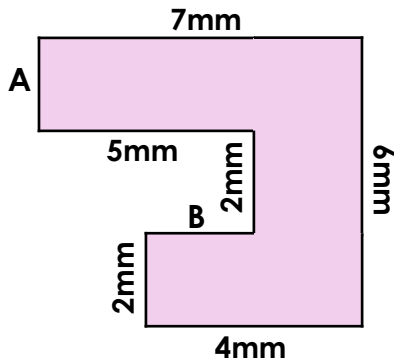
5a. Find the missing measurements and calculate the perimeter.



Not to scale

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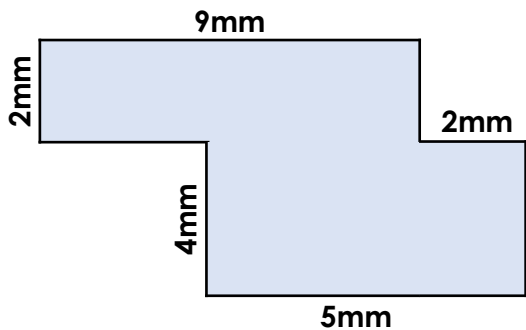
5b. Find the missing measurements and calculate the perimeter.



Not to scale

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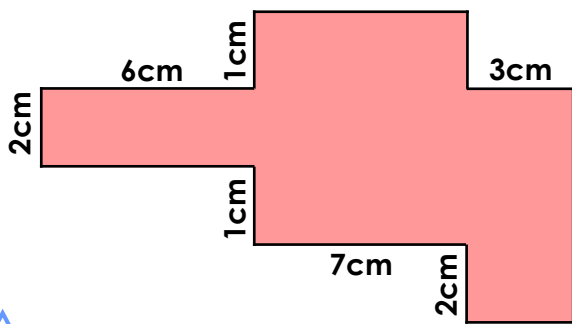
6a. True or false? The perimeter of the shape is 22mm.



Not to scale

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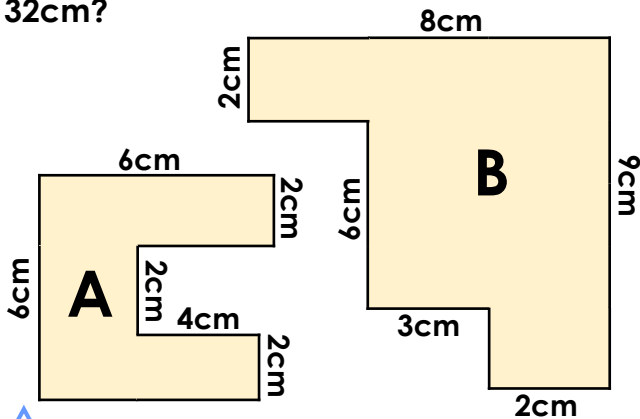
6b. True or false? The perimeter of the shape is 46cm.



Not to scale

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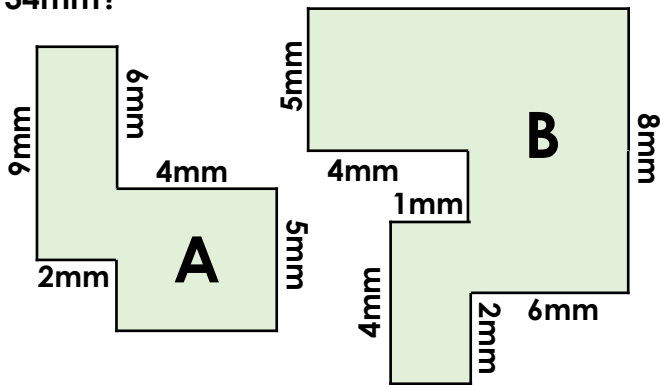
7a. Which shape has a perimeter of 32cm?



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7b. Which shape has a perimeter of 34mm?



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8a. Draw a compound rectilinear shape with a perimeter of 18cm.



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8b. Draw a compound rectilinear shape with a perimeter of 24cm.

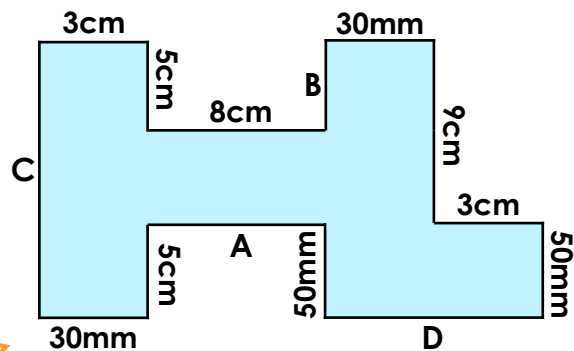


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# Perimeter of Rectilinear Shapes

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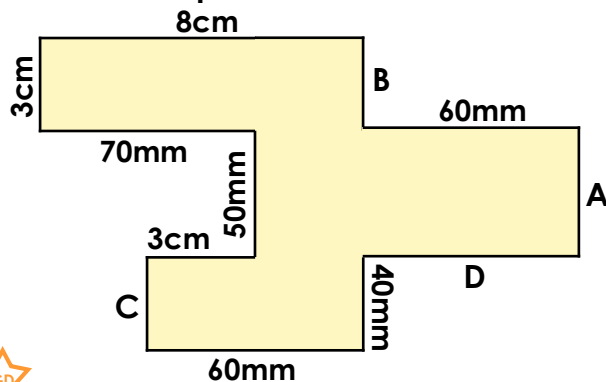
9a. Find the missing measurements and calculate the perimeter.



Not to scale

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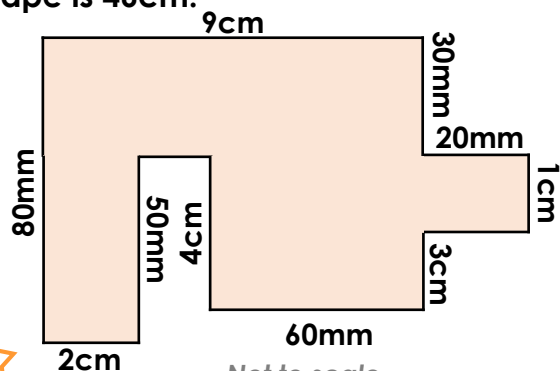
9b. Find the missing measurements and calculate the perimeter.



Not to scale

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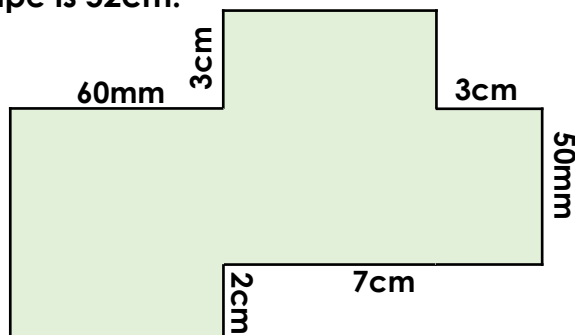
10a. True or false? The perimeter of the shape is 46cm.



Not to scale

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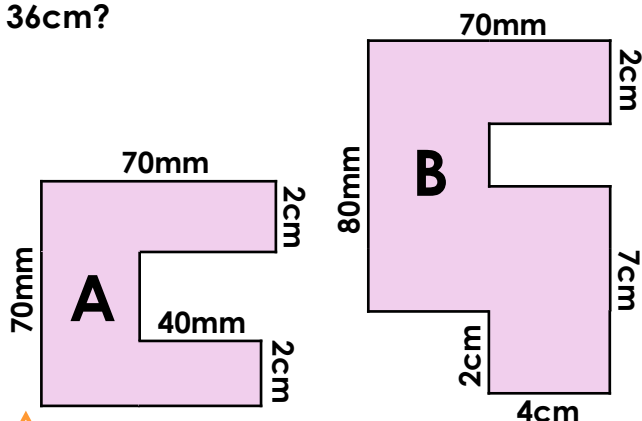
10b. True or false? The perimeter of the shape is 52cm.



Not to scale

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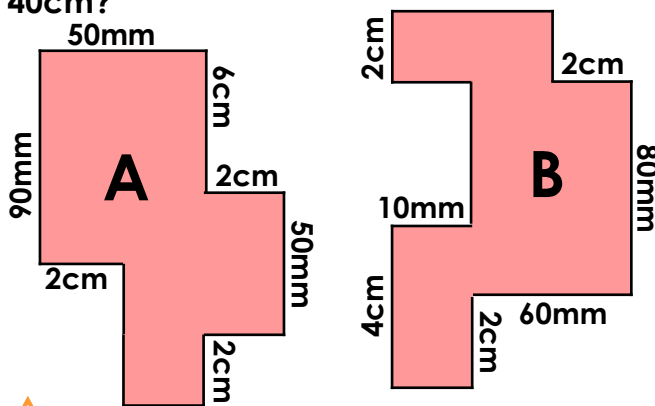
11a. Which shape has a perimeter of 36cm?



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11b. Which shape has a perimeter of 40cm?



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12a. Draw a compound rectilinear shape with a perimeter of 30cm which has 8 sides.



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12b. Draw a compound rectilinear shape with a perimeter of 22cm which has 10 sides.



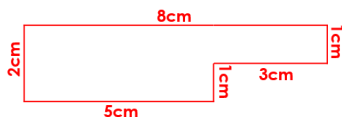
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## Varied Fluency

### Perimeter of Rectilinear Shapes

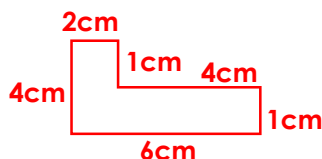
#### Developing

- 1a. **37cm**  
2a. **False, the perimeter is 26cm.**  
3a. **A**  
4a. **Any completed rectilinear shape with a perimeter of 20cm, for example:**



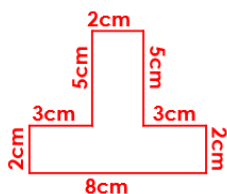
#### Expected

- 5a. **A = 1cm, B = 3cm; 30cm perimeter**  
6a. **False; the perimeter is 34mm.**  
7a. **A**  
8a. **Any compound rectilinear shape with a perimeter of 18cm, for example:**



#### Greater Depth

- 9a. **A = 8cm, B = 5cm, C = 14cm, D = 6cm; 82cm (820mm) perimeter.**  
10a. **True**  
11a. **A**  
12a. **Any compound rectilinear shape with a perimeter of 30cm and 8 sides, for example:**

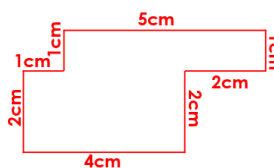


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### Perimeter of Rectilinear Shapes

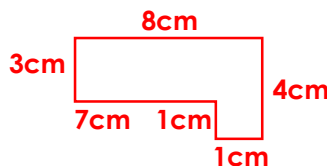
#### Developing

- 1b. **30cm**  
2b. **True**  
3b. **B**  
4b. **Any completed rectilinear shape with a perimeter of 18cm, for example:**



#### Expected

- 5b. **A = 2mm, B = 2mm; perimeter of 30mm**  
6b. **False; the perimeter is 44cm.**  
7b. **A**  
8b. **Any rectilinear shape with a perimeter of 24cm, for example:**



#### Greater Depth

- 9b. **A = 5cm, B = 3cm, C = 4cm, D = 6cm; 60cm (600mm) perimeter.**  
10b. **False, the perimeter is 46cm.**  
11b. **A and B**  
12b. **Any compound rectilinear shape with a perimeter of 22cm and 10 sides, for example:**

