Varied Fluency
Step 9: Calculate Perimeter

National Curriculum Objectives:

Mathematics Year 3: (3M7) Measure the perimeter of simple 2-D shapes

Differentiation:

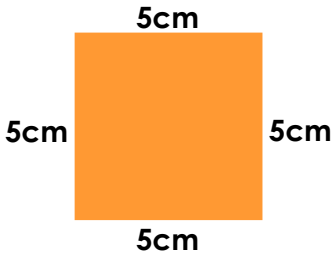
Developing Questions to support calculating the perimeter of regular polygons using cm, where all the lengths are given.
Expected Questions to support calculating the perimeter of regular polygons, triangles and rectangles using cm or mm, where not all the lengths are given.
Greater Depth Questions to support calculating the perimeter of regular and irregular polygons where some conversions between mm and cm used, where not all the lengths are given.

More Year 2 and Year 3 Length Height and Perimeter resources.

Did you like this resource? Don't forget to review it on our website.

Calculate Perimeter

1a. Complete the calculations to work out the perimeter of the square.



5cm + ☐ + ☐ + 5cm = ☐

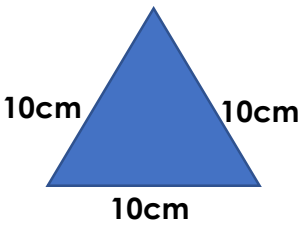
5cm x ☐ = ☐

Not to scale

3 VF

Calculate Perimeter

1b. Complete the calculations to work out the perimeter of the triangle.



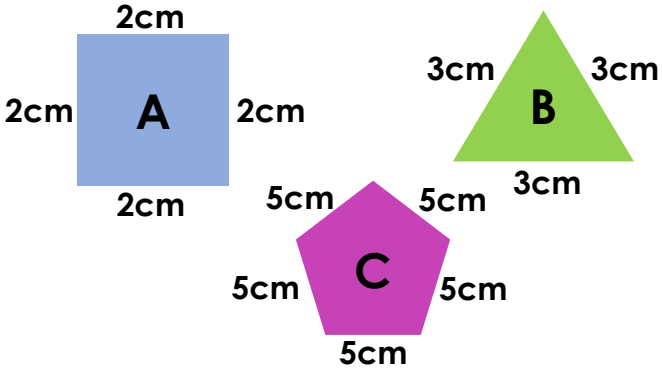
☐ + ☐ + 10cm = ☐

10cm x ☐ = ☐

Not to scale

3 VF

2a. Match the shapes to their perimeters.

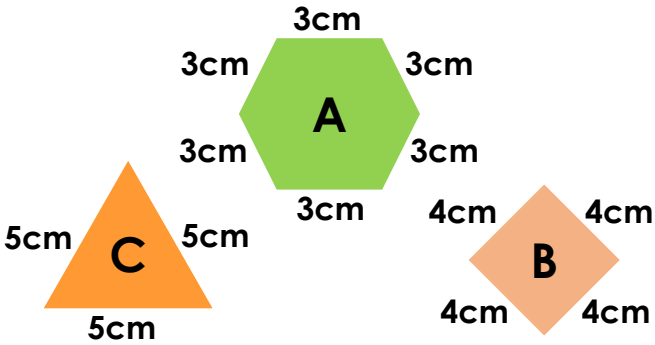


25cm	9cm	8cm

Not to scale

3 VF

2b. Match the shapes to their perimeters.

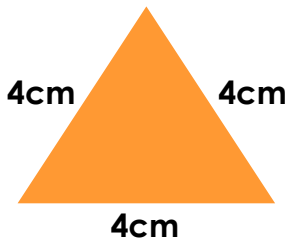


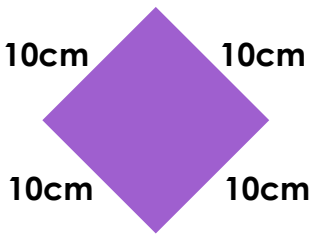
16cm	18cm	15cm

Not to scale

3 VF

3a. Circle the calculation that does NOT find the perimeter of one of the shapes.



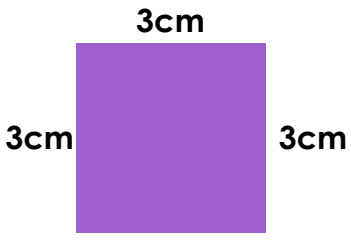


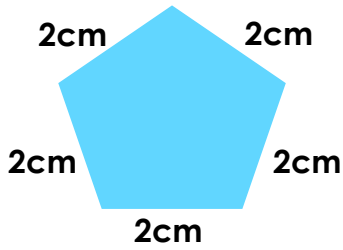
10 x 4
4 x 3
4 + 4 + 4 + 4

Not to scale

3 VF

3b. Circle the calculation that does NOT find the perimeter of one of the shapes.





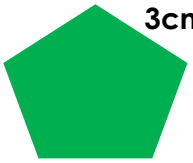
2 + 2 + 2 + 2 + 2
2 x 3
3 x 4

Not to scale

3 VF

Calculate Perimeter

4a. Complete the calculations to work out the perimeter of the regular pentagon.



3cm + ☐ + ☐ + 3cm + ☐ = ☐

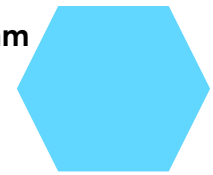
3cm x ☐ = ☐

Not to scale

3 VF

Calculate Perimeter

4b. Complete the calculations to work out the perimeter of the regular hexagon.



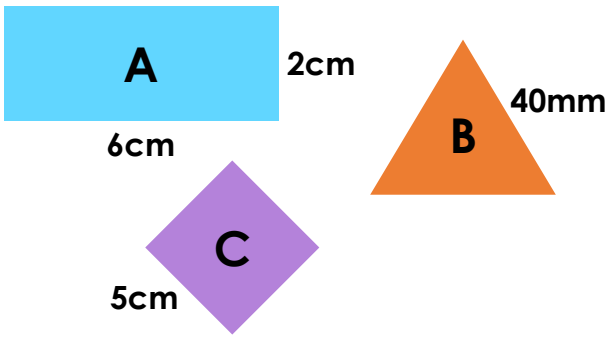
20mm + ☐ + ☐ + 20mm + ☐ + ☐ = ☐

20mm x ☐ = ☐

Not to scale

3 VF

5a. Match the shapes to their perimeters.

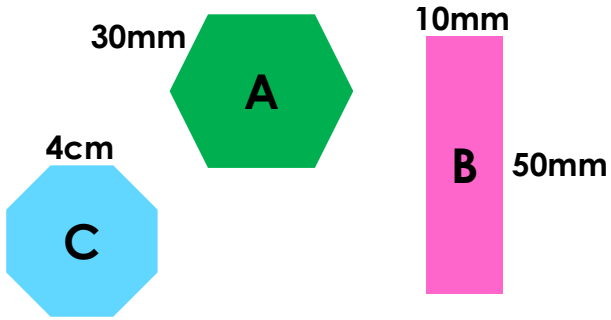


20cm | 120mm | 16cm

Not to scale

3 VF

5b. Match the shapes to their perimeters.

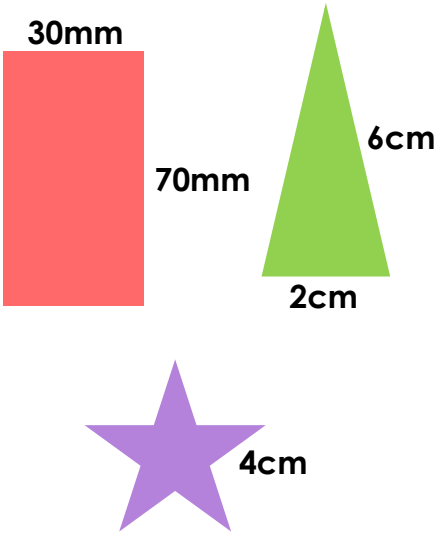


120mm | 32cm | 180mm

Not to scale

3 VF

6a. Circle the calculation that does NOT find the perimeter of one of the shapes.



4 x 10

6 + 2

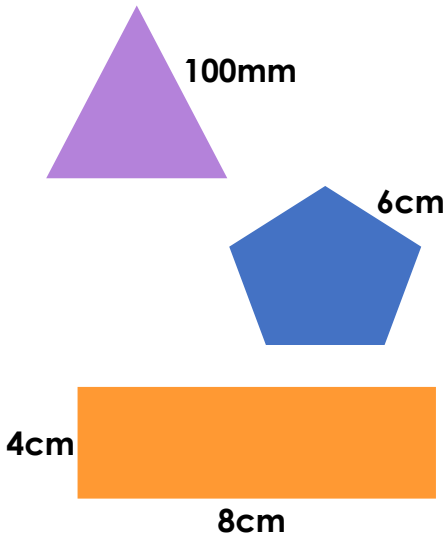
6 + 6 + 2

70 + 70 + 30 + 30

Not to scale

3 VF

6b. Circle the calculation that does NOT find the perimeter of one of the shapes.



6 x 5

8 x 4

8 + 8 + 4 + 4

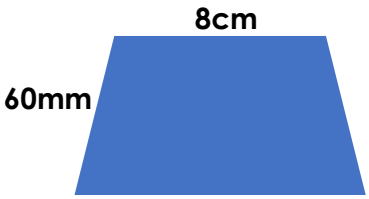
100 x 3

Not to scale

3 VF

Calculate Perimeter

7a. Complete the calculations to work out the perimeter of the shape.



□ + □ + □ + □ = □

2 x □ + □ = □

Not to scale

3 VF

Calculate Perimeter

7b. Complete the calculations to work out the perimeter of the shape.

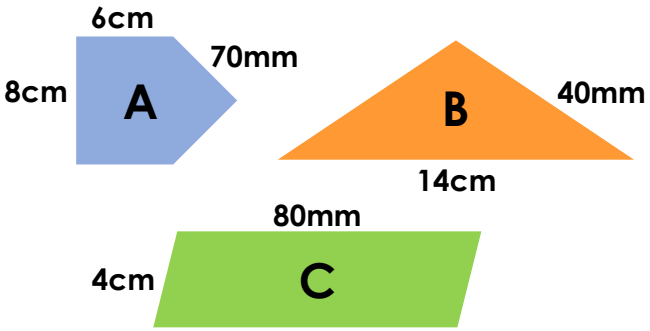
□ + □ + □ + □ = □

2 x □ + □ = □

Not to scale

3 VF

8a. Match the shapes to their perimeters.

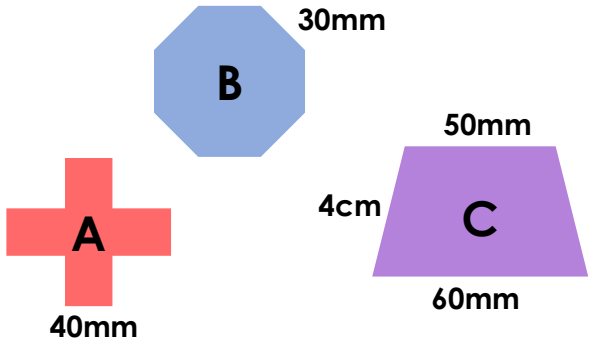


220mm	24cm	34cm

Not to scale

3 VF

8b. Match the shapes to their perimeters.

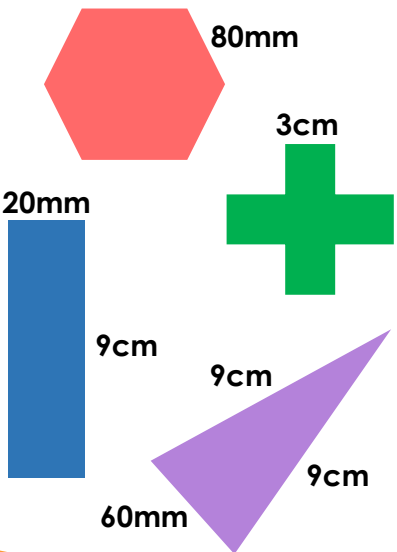


24cm	190mm	48cm

Not to scale

3 VF

9a. Circle the calculation that does NOT find the perimeter of one of the shapes.

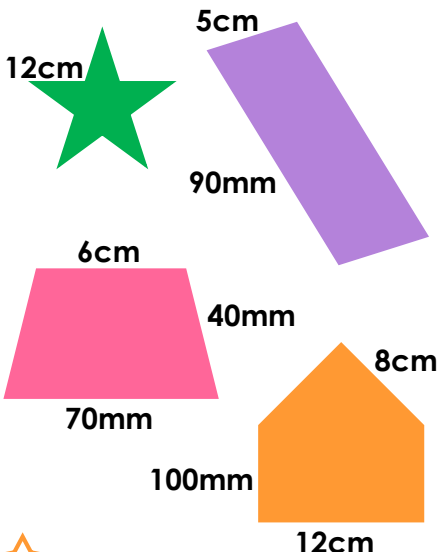


9 + 9 + 2 + 2
9 + 6 + 9
8 x 6
9 x 2
3 x 12

Not to scale

3 VF

9b. Circle the calculation that does NOT find the perimeter of one of the shapes.



70 + 60 + 40 + 40
9 + 9 + 5 + 5
8 + 8 + 10 + 10 + 12
12 x 10
90 + 5

Not to scale

3 VF

Varied Fluency
Calculate Perimeter

Developing

1a. 5cm + 5cm + 5cm + 5cm = 20cm, 5 x 4 = 20cm

2a. A = 8cm, B = 9cm, C = 25cm

3a. 4 + 4 + 4 + 4

Expected

4a. 3cm + 3cm + 3cm + 3cm + 3cm = 15cm, 3 x 5 = 15cm

5a. A = 16cm, B = 120mm, C = 20cm

6a. 6 + 2

Greater Depth

7a. 8cm + 12cm + 6cm + 6cm = 32cm, 2 x 6 + 20 = 32cm. Also accept the calculations completed using mm.

8a. A = 34cm, B = 220mm, C = 24cm

9a. 9 x 2

Varied Fluency
Calculate Perimeter

Developing

1b. 10cm + 10cm + 10cm = 30cm, 10 x 3 = 30cm

2b. A = 18cm, B = 16cm, C = 15cm

3b. 2 x 3

Expected

4b. 20mm + 20mm + 20mm + 20mm + 20mm + 20mm = 120mm, 20 x 6 = 120mm

5b. A = 180mm, B = 120mm, C = 32cm

6b. 8 x 4

Greater Depth

7b. 7cm + 7cm + 11cm + 11cm = 36cm, 2 x 7 + 22 = 36cm, or 2 x 11 + 14 = 36cm. Also accept the calculations completed using mm.

8b. A = 48cm, B = 24cm, C = 190mm

9b. 90 + 5