KS2 AREA, PERIMETER & VOLUME BOOKLET

NI TUTOING SCHOOL

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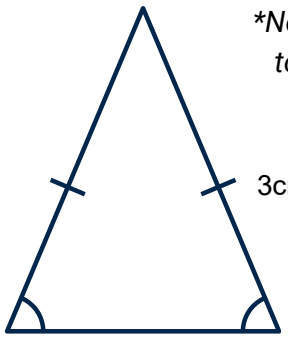
1 **What is the perimeter of the triangle below?**



*Not drawn to scale

ISOSCELES!

4+3+3

10 cm

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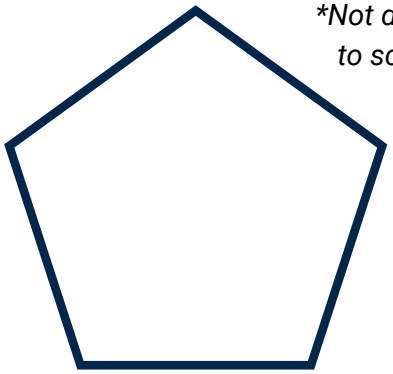
2 **The pentagon below is regular. What is the perimeter of the pentagon?**



*Not drawn to scale

6×5=30

30 cm

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3 **What is the perimeter of the rectangle?**

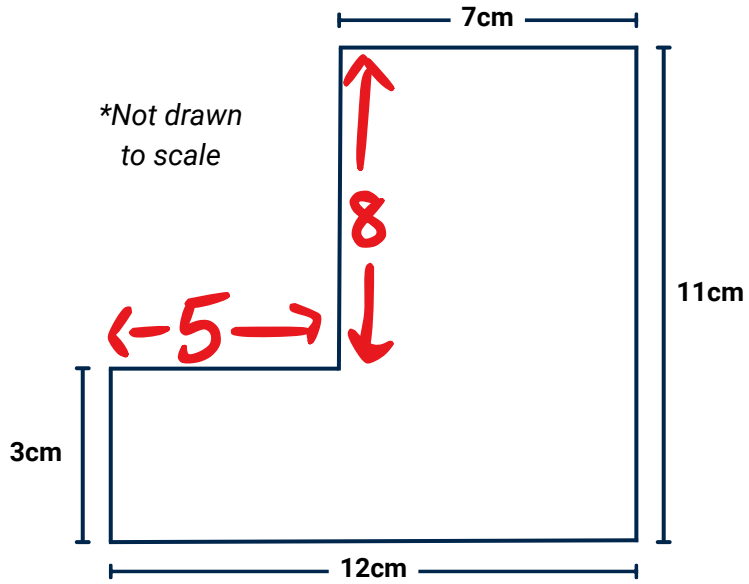
50mm=5cm

10+5+10+5

*Not drawn to scale

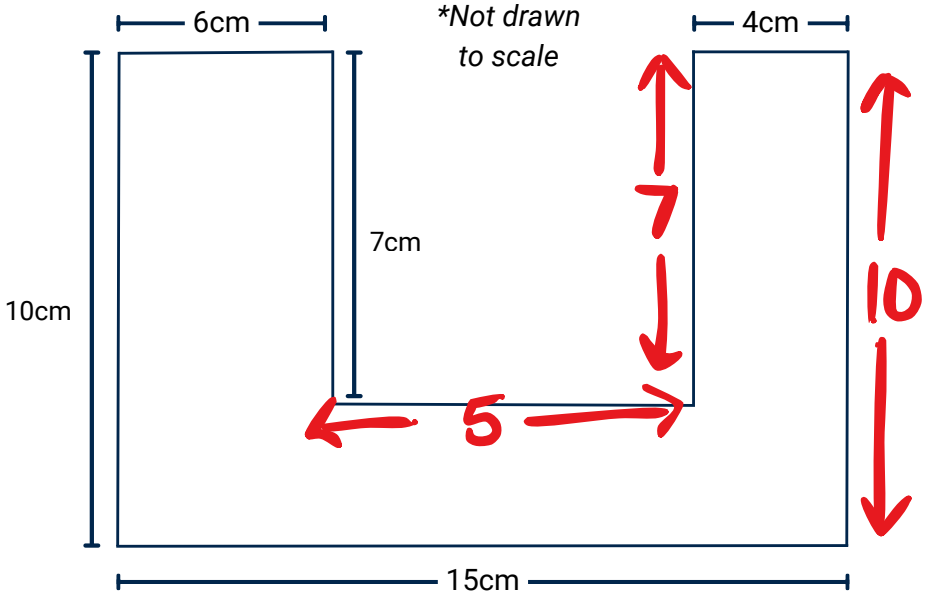
30 cm

4 What is the perimeter of this composite shape?



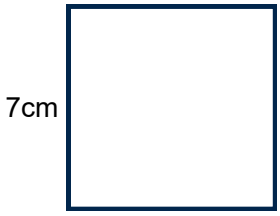
A 41cm **B** 40cm **C** 33cm **D** 46cm **E** 38cm

5 What is the perimeter of this composite shape?



A 42cm **B** 59cm **C** 64cm **D** 52cm **E** 49cm

6 **What is the area of this square?**



*Not drawn to scale

49 cm^2

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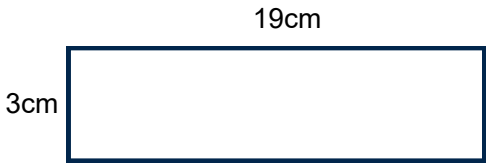
7 **What is the area of this rectangle?**



*Not drawn to scale

57 cm^2

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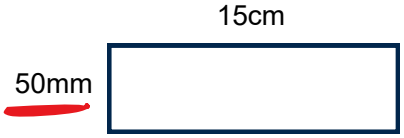
8 **What is the area of this rectangle?**

15×5



*Not drawn to scale

75 cm^2

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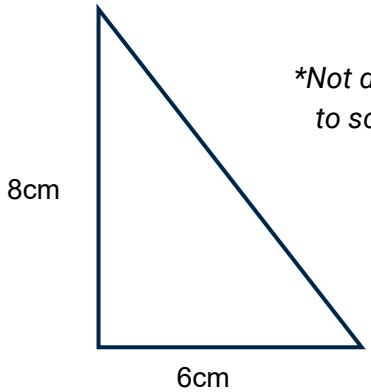
9 **Calculate the area of the triangle below.**



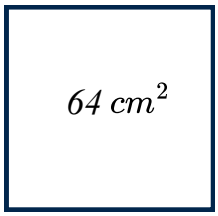
*Not drawn to scale

6×8=48

48÷2=24

24 cm^2

10 **The area of this square is 64 cm squared. What is the length of one side?**



*Not drawn to scale

$\sqrt{64} = 8$

8 cm

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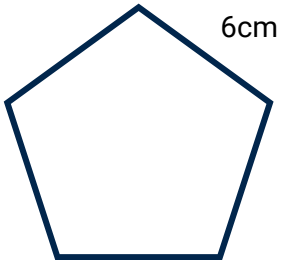
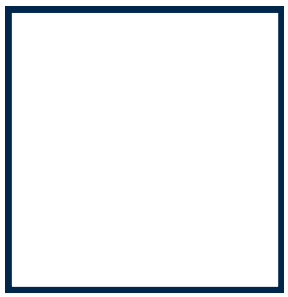
11 A regular pentagon has side length 6cm. It has the same perimeter as a square.



$6 \times 5 = 30$

*Not drawn to scale



$\frac{30}{4} = 7.5$

What is the length of one side of the square?

A 6cm **B** 8cm **C** 5cm **D** 30cm **E** 7.5cm

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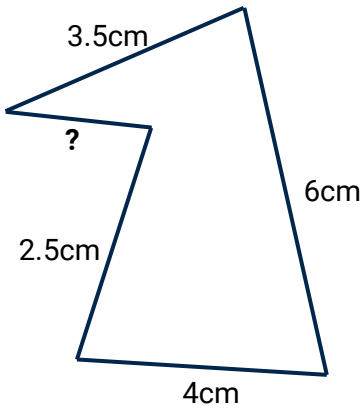
12 The shape below is a pentagon. Four of its sides are labelled.
The perimeter of the pentagon is 17.5cm. **What is the length of the missing side?**

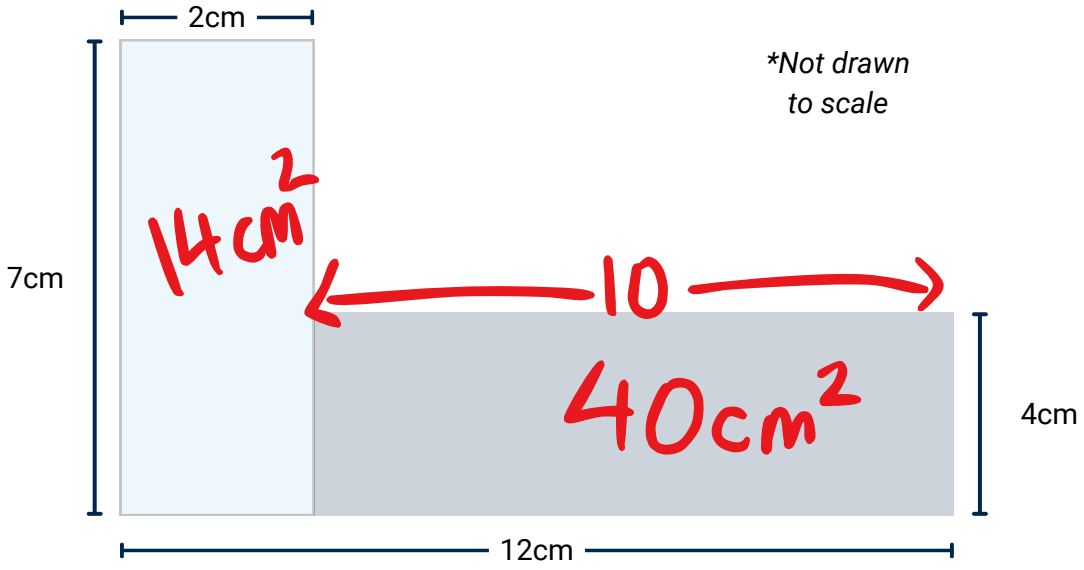
$17.5 - 16.0 = 1.5$



*Not drawn to scale

A 2.5cm **B** 3.5cm **C** 1cm **D** 1.5cm **E** 2cm

13 **What is the area of this composite shape?**



A 68 cm² **B** 56 cm² **C** 62 cm² **D** 48 cm² **E** 44 cm²

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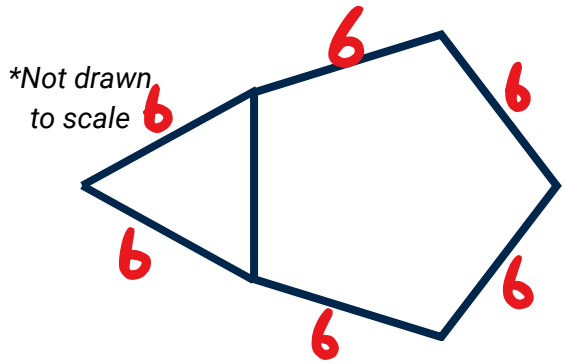
14 Shown below is a hexagon formed by joining an equilateral triangle to a regular pentagon along one side.
The perimeter of the equilateral triangle is 18 cm.

$\frac{18}{3} = 6$

What is the perimeter of the hexagon?

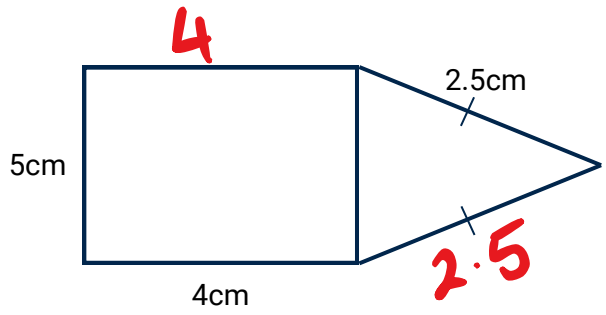


A 36 cm **B** 48 cm **C** 42 cm **D** 30 cm **E** 24 cm

15 Shown below is a pentagon formed by joining a rectangle and an isosceles triangle.

What is the perimeter of the pentagon?

*Not drawn to scale



A 11.5 cm **B** 16.5 cm **C** 14 cm **D** 18 cm **E** 19 cm

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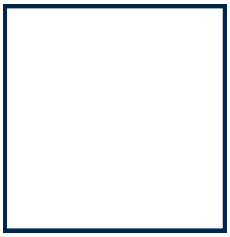
16 The perimeter of this square is 40 cm. What is the area of the square?

$\frac{40}{4} = 10$



*Not drawn to scale

10×10

A 80 cm² **B** 200 cm² **C** 40 cm² **D** 100 cm² **E** 160 cm²

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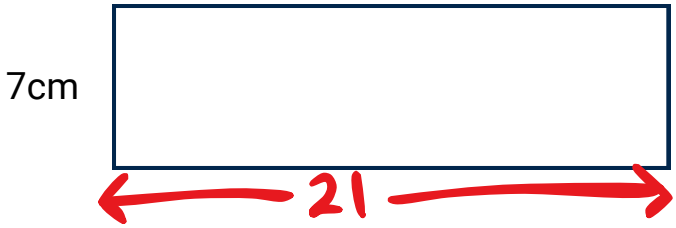
17 The height of a rectangle is 7 cm. The width of the rectangle is three times as long.

What is the area of the rectangle?

$7 \times 3 = 21$

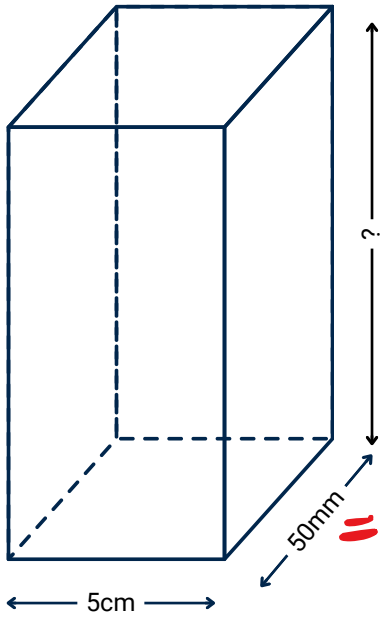


*Not drawn to scale

$21 \times 7 = 147$

A 21 cm² **B** 98 cm² **C** 147 cm² **D** 105 cm² **E** 70 cm²

18 The cuboid below has a volume of 250 cm³.
What is the height of the cuboid?



*Not drawn to scale

5x5x? = 250
25x? = 250
? = 10
= 5cm

A 5 cm **B** 15 cm **C** 10 cm **D** 1 cm **E** 25 cm

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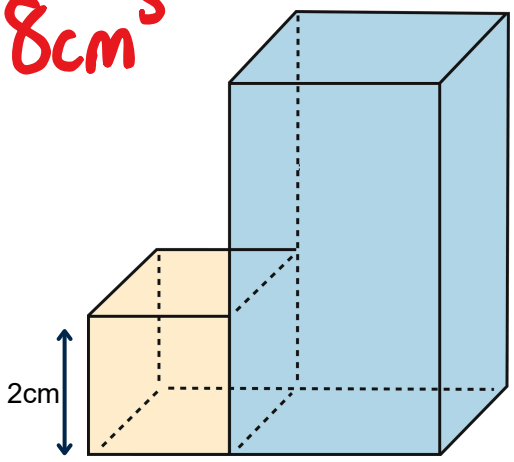
19 Shown below is a cube and a cuboid joined together.
The height of the cube is 2 cm.
The volume of the cuboid is 4 times the volume of the cube.

What is the total volume of both shapes together?

Cube = 8cm³

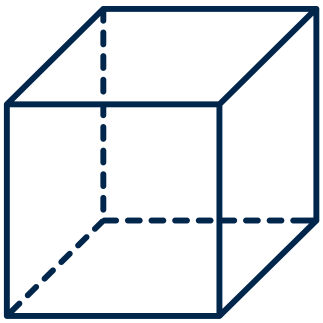


*Not drawn to scale

Cuboid
= 8 x 4
= 32 cm³

A 16 cm³ **B** 20 cm³ **C** 40 cm³ **D** 48 cm³ **E** 32 cm³

20 The volume of this cube is 125 cm³.
What is the length of one side of the cube?



$\sqrt[3]{125}$

$= 5$

5 cm

END