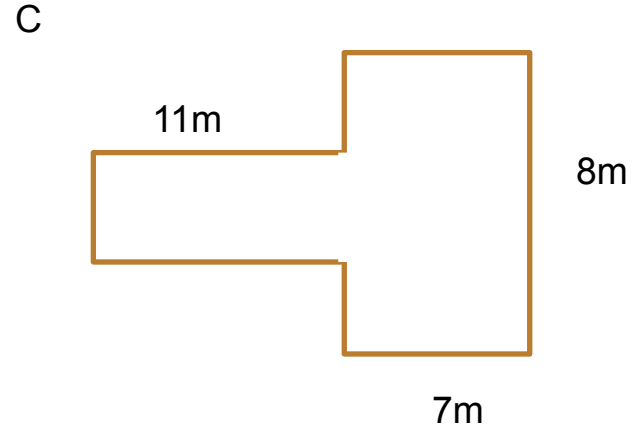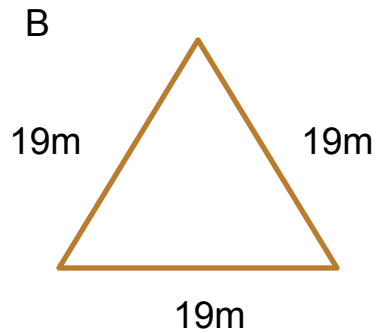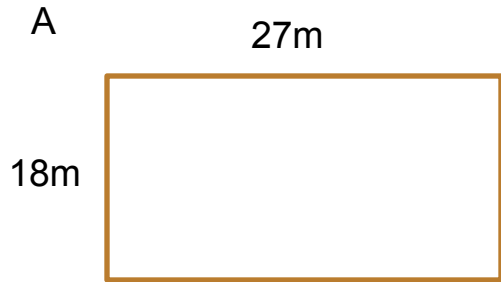# Year 5 Summer 2 Week 8 Lesson 5

Can I find the area of a rectilinear shape?

Fast Five

What are the perimeters of these shapes? All measurements in m.

A

27m

18m

B

19m   19m

19m
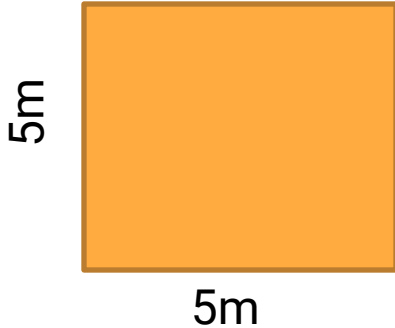
C

11m

8m

7m

D

10 m

12 m

8 m

5m

Fast five answers

A = 90m

B = 57m

C = 52m

D = 60m

Finding the area of a rectangle or square

Square

5m

5m

Area = Two of the sides multiplied by each other
5m x 5m = 25m²

Rectangle

5m

10m

Area = The long side multiplied by the short side
10m x 5m = 50m²
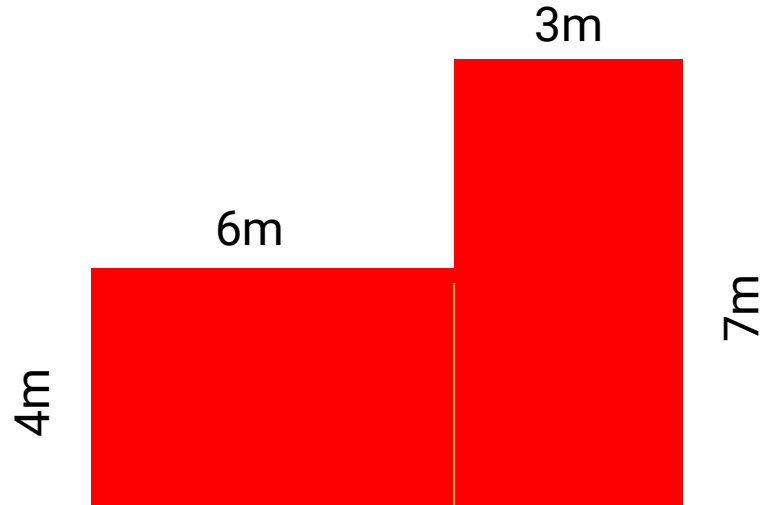
Don't forget the units are squared ²

Compound Area

- Compound area is where a shape can be made up of other shapes.
- The area of a compound shape can be found by calculating the area of each shape from which they can be formed, and adding these together.
- Here is a compound shape made of 2 rectangles.

1

2
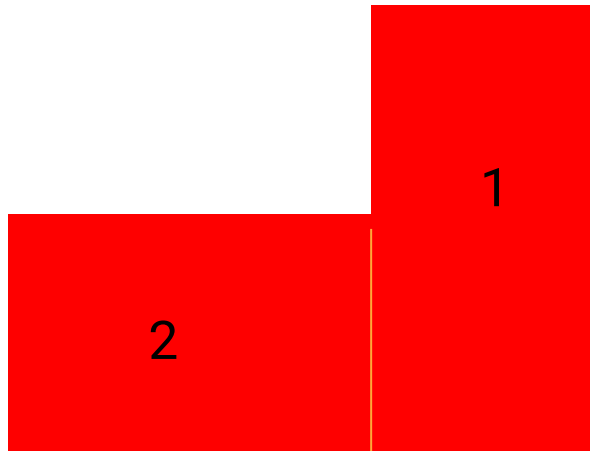
Compound Area

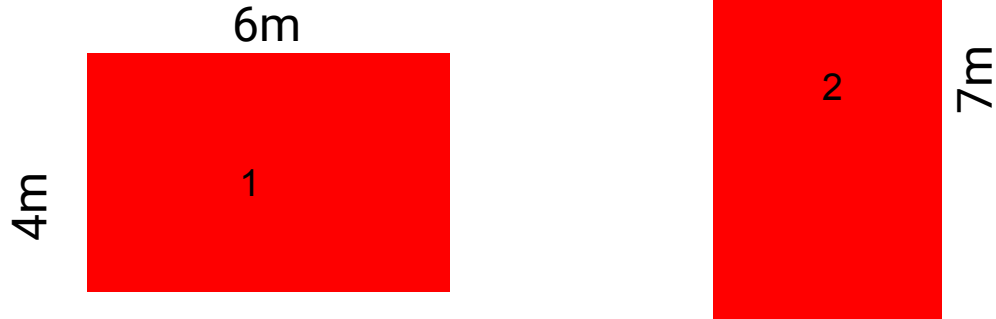Calculate the area of this compound shape

3m

6m

7m

4m

Compound Area

We split the shape into 2 rectangles.
We find the area of each.
We then add them together

3m

6m

7m

2

4m

1

Area of Shape 1 = 4m x 6m = 24m²   Area of Shape 2 = 7m x 3m = 21m²
Overall area = Area Shape 1 + Area Shape 2
24m² + 21m² = **45m²**

Calculate the area of this compound shape

4cm

7cm

9cm

6cm

Calculate the area of this compound shape

We split the shape into 2 rectangles.
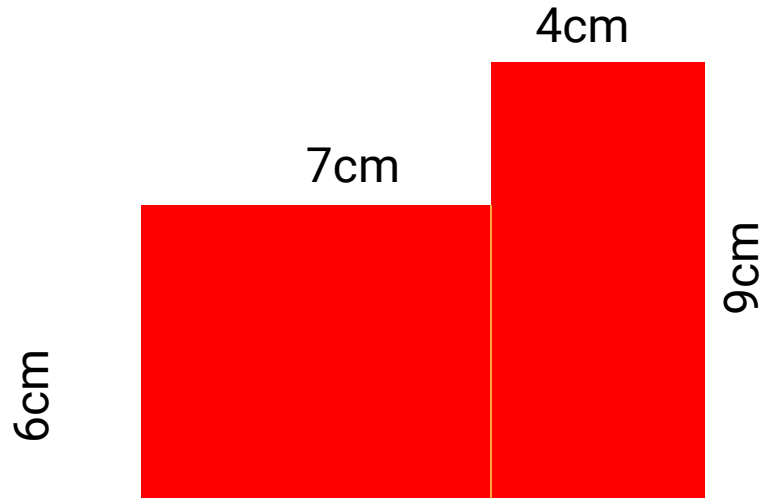We find the area of each.
We then add them together

4cm

7cm

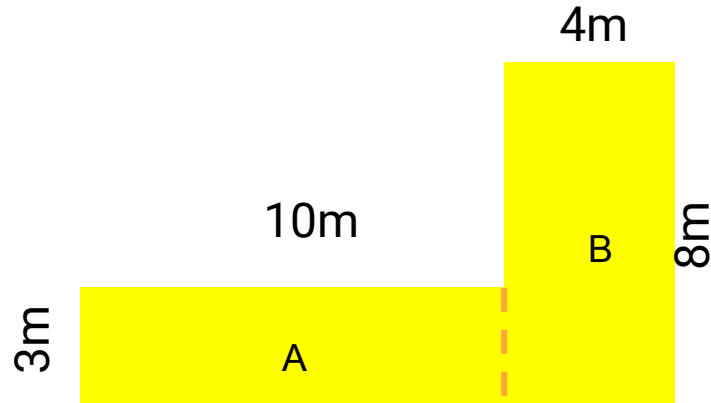9cm

6cm

B

A
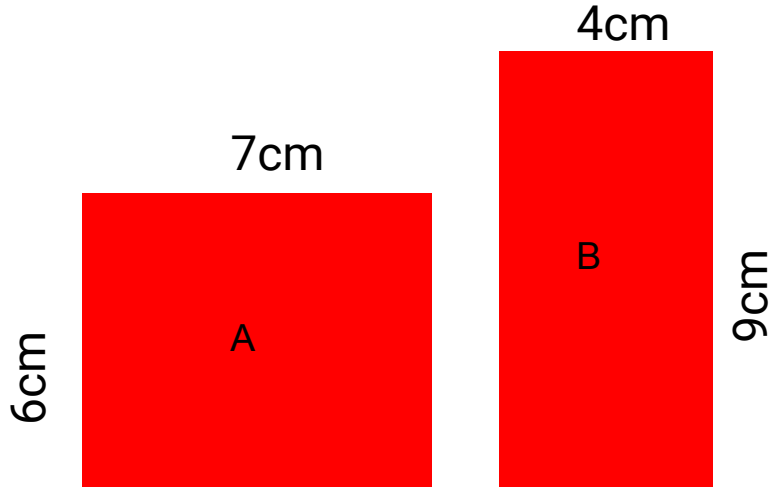
Area Shape A = 6cm x 7cm = 42cm²   Area Shape B = 4cm x 9cm = 36cm²

42cm² + 36cm² = **78cm²**

Calculate the area of this compound shape.

Area = Shape A + Shape B
Area = (3m x 10m) + (8m x 4m)
30m² + 32m² = **62m²**

Have a go at this one.
Calculate the area of this compound shape
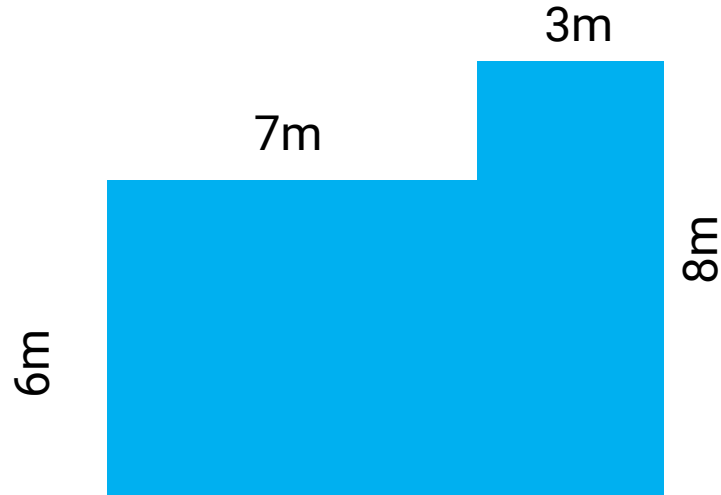
5m

10m

3m

A

B

5m

Answer

5m

10m

3m

A

B

5m
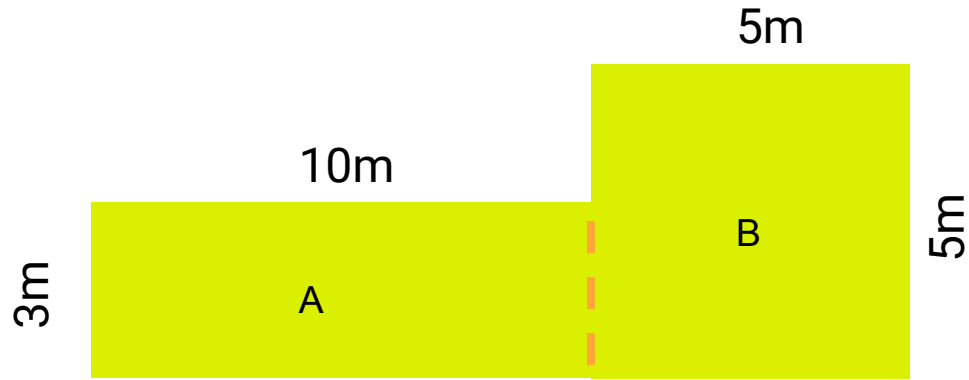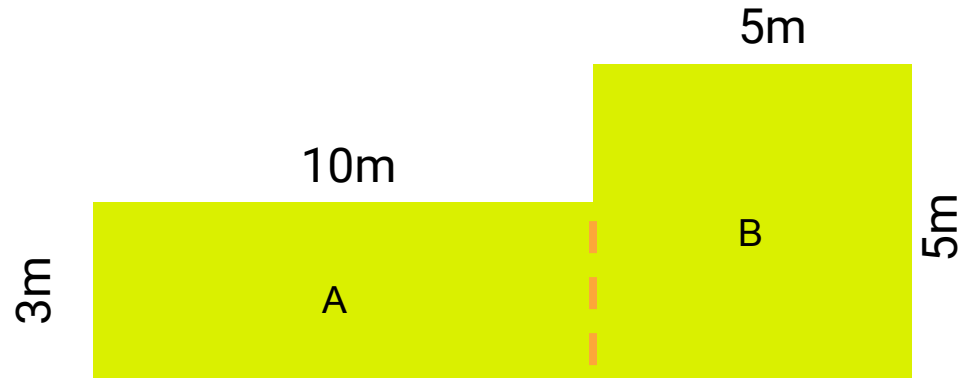
Area = Area Shape A + Area Shape B
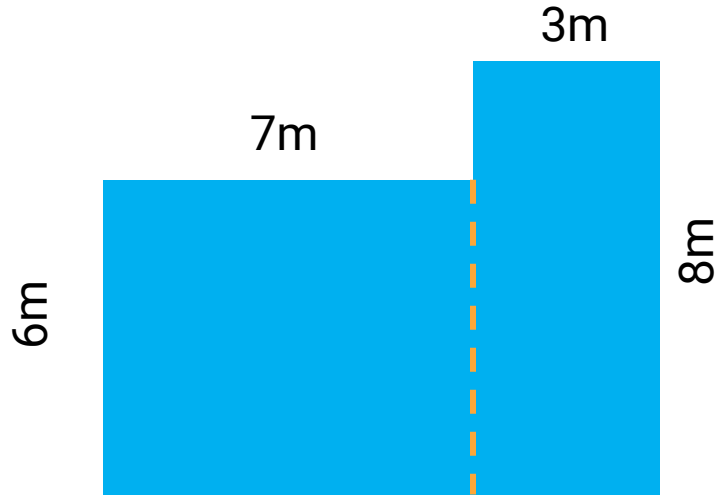Area = (3m x 10m) + (5m x 5m)
Area = 30m² + 25m² = 55m²

Calculate the area of this compound shape

3m

7m

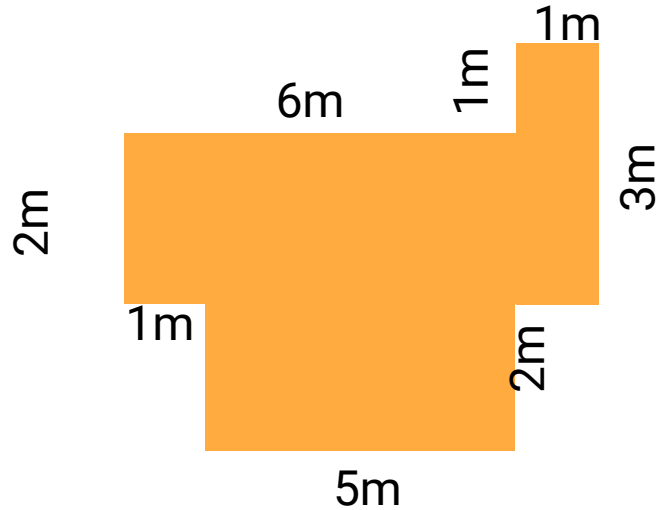8m

6m

Answer

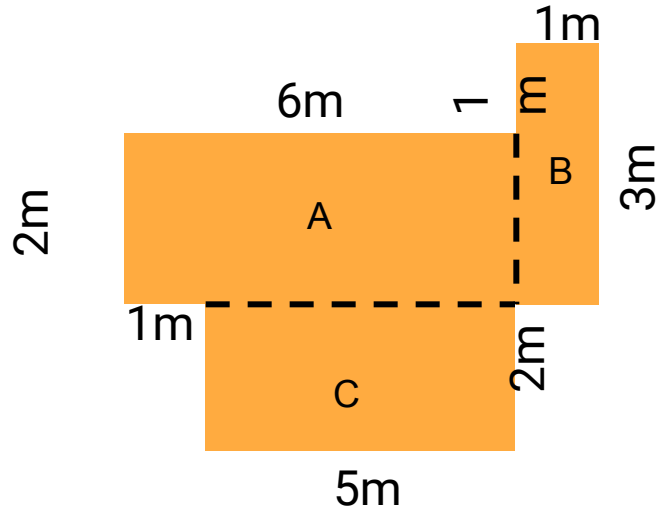Here we have had to draw an imaginary line ourselves to make 2 rectangles

3m

7m

8m

6m

Area = (6m x 7m) + (8m x 3m) = 42m² + 24m² = 66m²

Find the area of this compound shape

Find the area of this compound shape

Here we split the shape into 3 rectangles.
We then find the area of each.
We can then add them together.

Area = Area A + Area B + Area C
Area = (6m x 2m) + (3m x 1m) + (5m x 2m)
Area = 12m² + 3m² + 10m² = 25m²