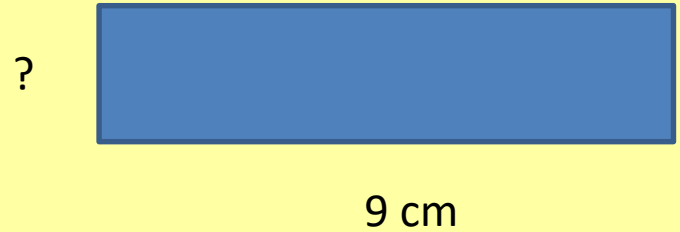


Calculate the perimeter of a regular pentagon with side lengths of 8cm

What information do you know?

A square with sides of 6cm has the same area as this rectangle



Find the length of the missing side, and work out the perimeter of the rectangle.

William draws a rectangle with sides of 4cm and 8cm. Draw another rectangle with the same perimeter, but a different area.

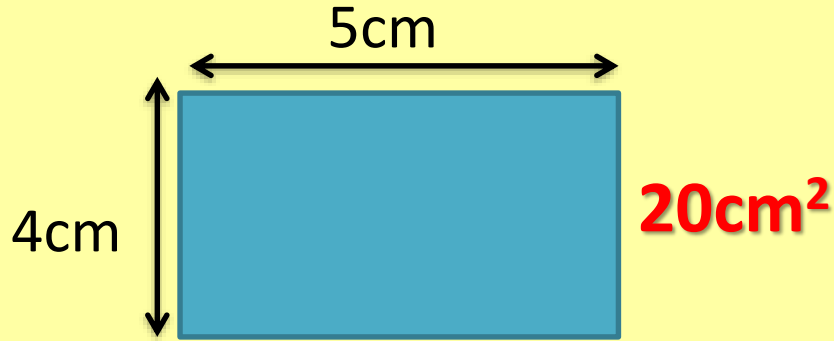
Area of a Triangle and Compound Shapes

Can I calculate the area of a triangle and compound shapes?

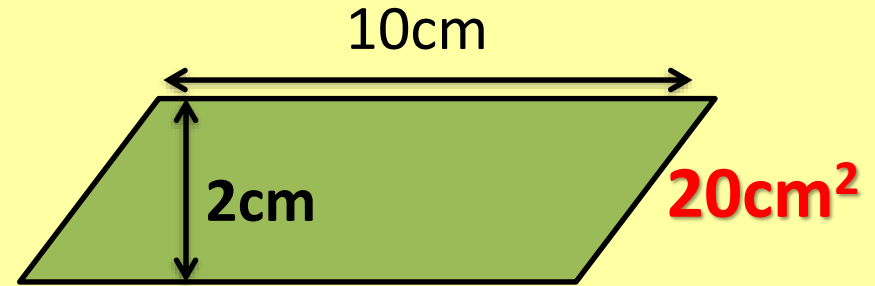
Success Criteria	Pupil check	Teacher check
I can calculate the area of compound shapes made up of rectangles.		
I can calculate the area of a triangle		
I can calculate the area of compound shapes made up of different shapes.		

Connect the Learning

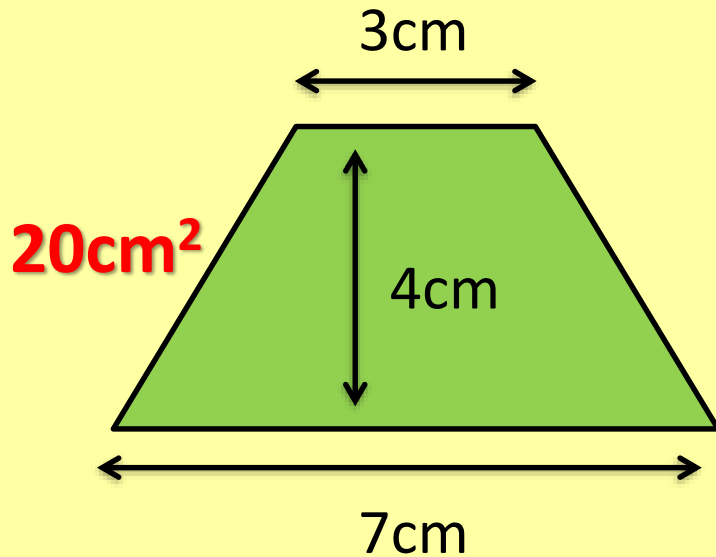
Calculate the Area of these shapes



$$\text{Area} = \text{Width} \times \text{Height}$$



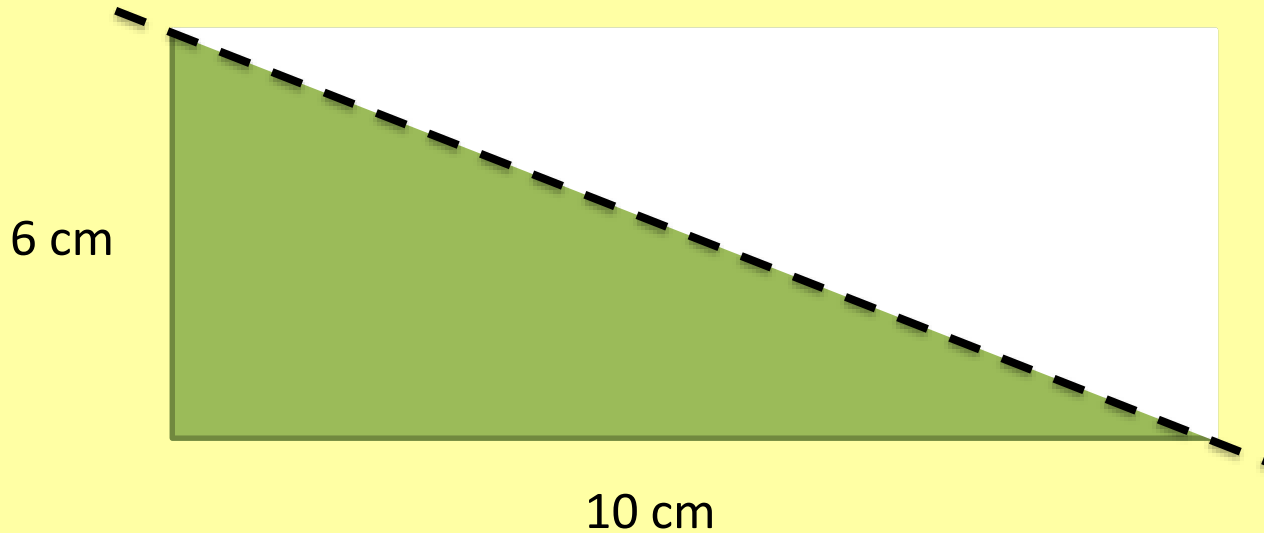
$$\text{Area} = \text{Width} \times \text{Height}$$



$$\text{Area} = \frac{(a+b) \times h}{2}$$

What do you notice?

New Information



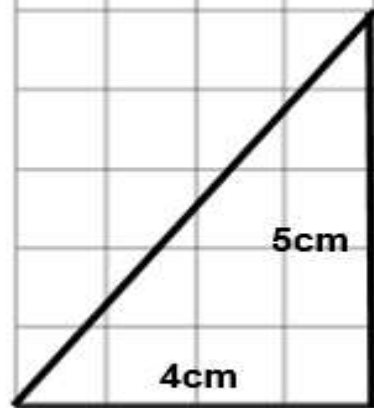
$$\text{Area of a Triangle} = \frac{\text{Base} \times \text{Height}}{2}$$

Challenge Activity

Worksheets: 10 minutes

Find the area of the triangles. You can use the squares to help you.

a



Area= ___ cm²

b



Area= ___ cm²

c



Area= ___ cm²

d



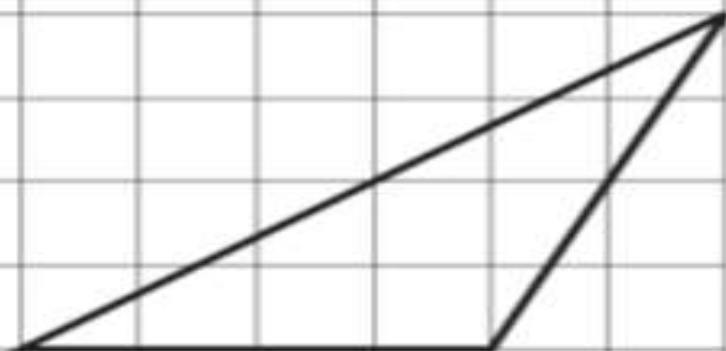
Area= ___ cm²

e



Area= ___ cm²

f



Area= ___ cm²

a



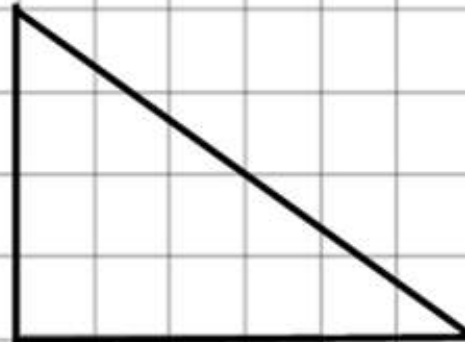
Area = 10 cm²

b



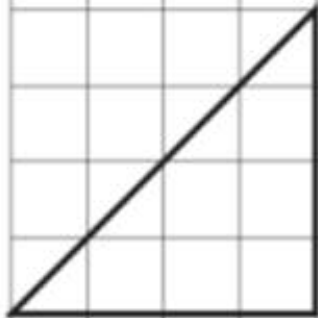
Area = 6 cm²

c



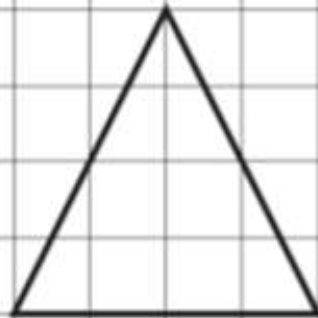
Area = 12 cm²

d



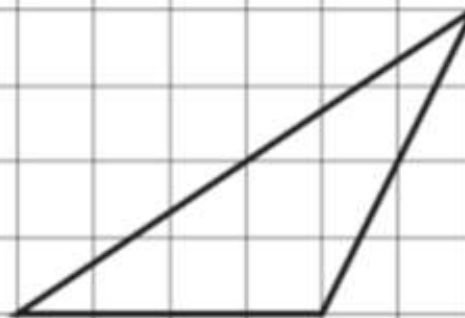
Area = 8 cm²

e



Area = 8 cm²

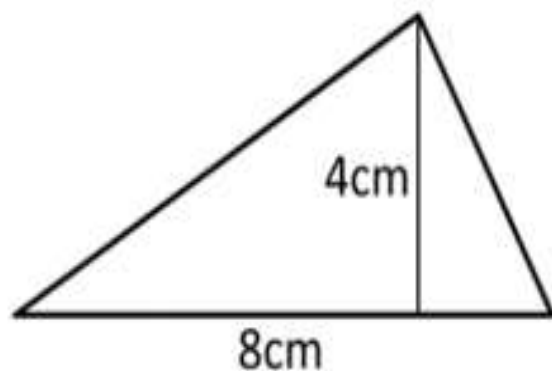
f



Area = 8 cm²

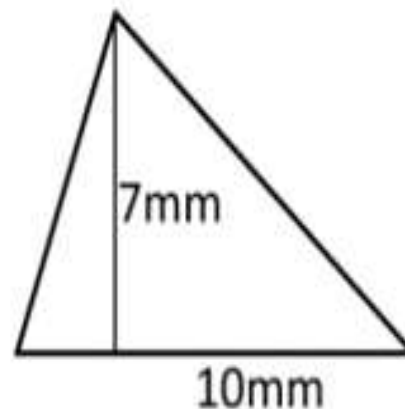
Work out the area of the following triangles. They are not drawn to scale.

1)



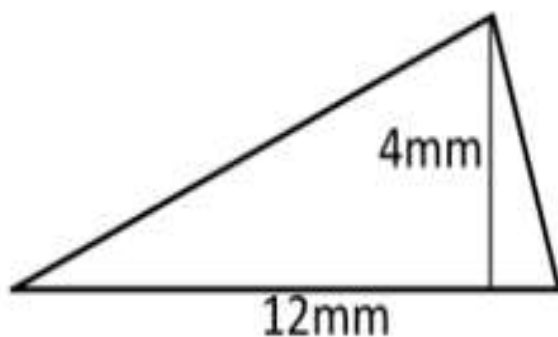
Area = _____ cm^2

2)



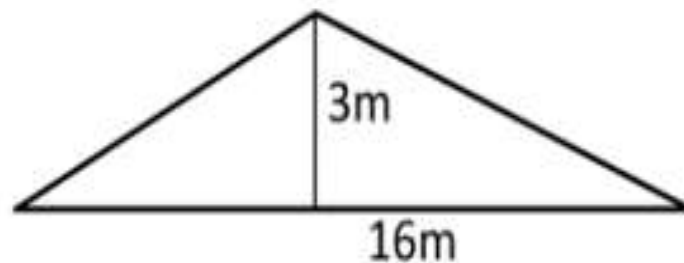
Area = _____ mm^2

3)

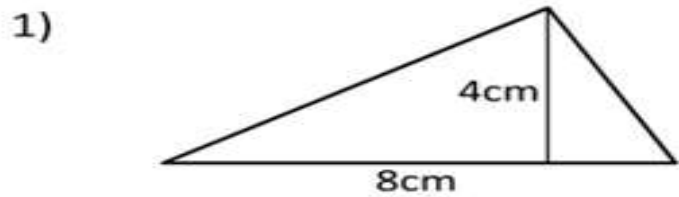


Area = _____ mm^2

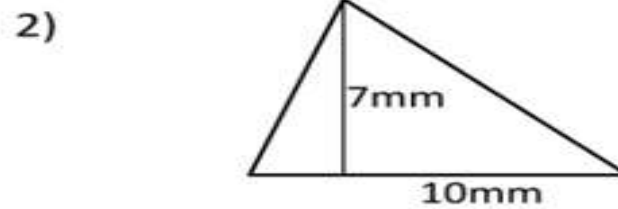
4)



Area = _____ m^2



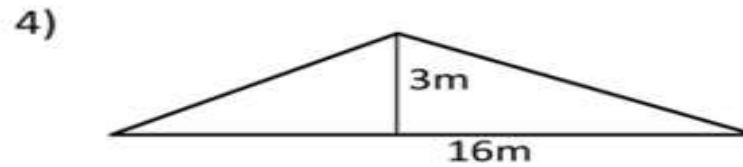
Area = 16 cm²



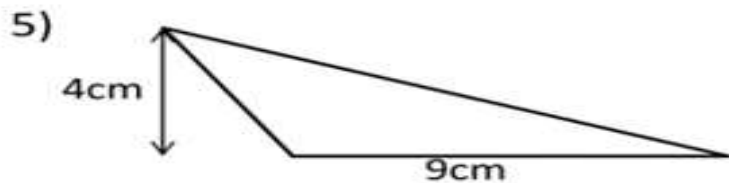
Area = 35 mm²



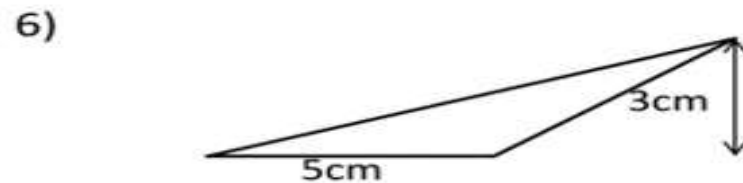
Area = 24 mm²



Area = 24 m²

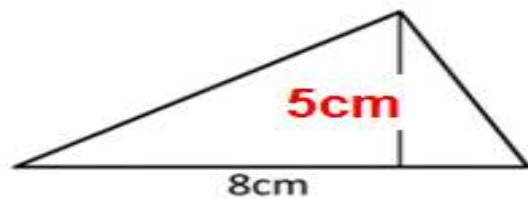


Area = 18 cm²



Area = 7.5 cm²

Work out the missing length on this triangle:

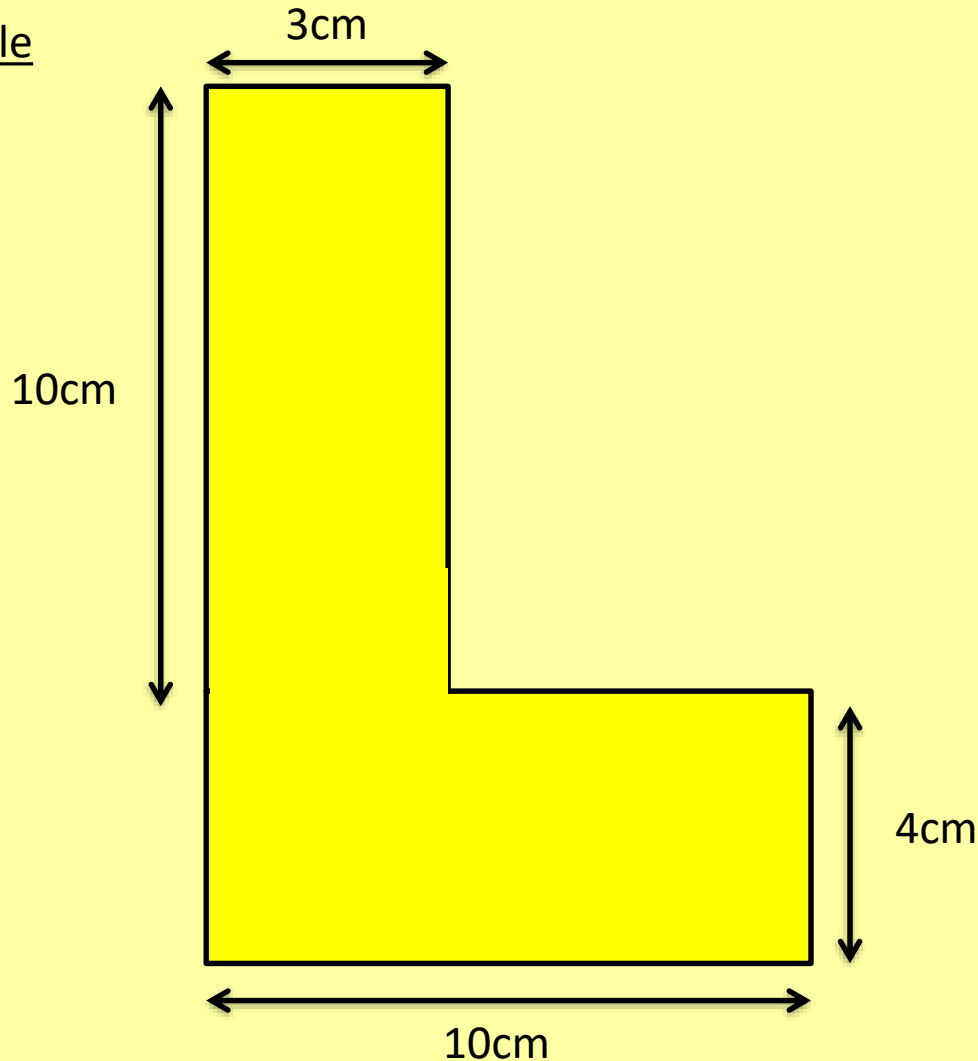


Area = 20 cm²

New Information

A Compound Shape is made up of two or more shapes put together

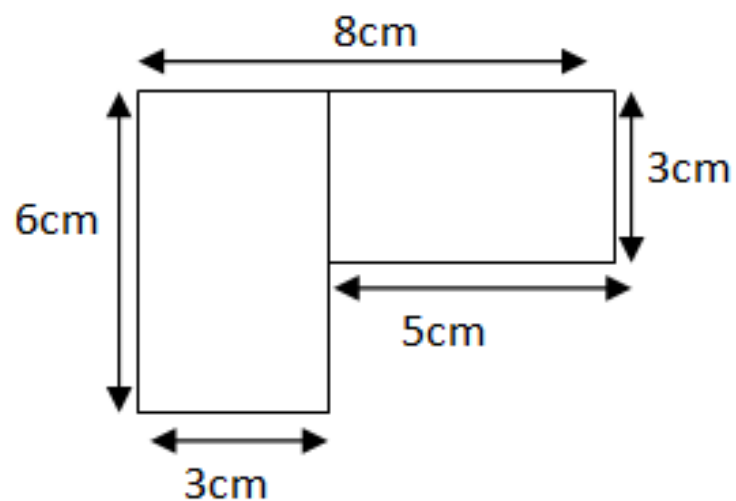
Example



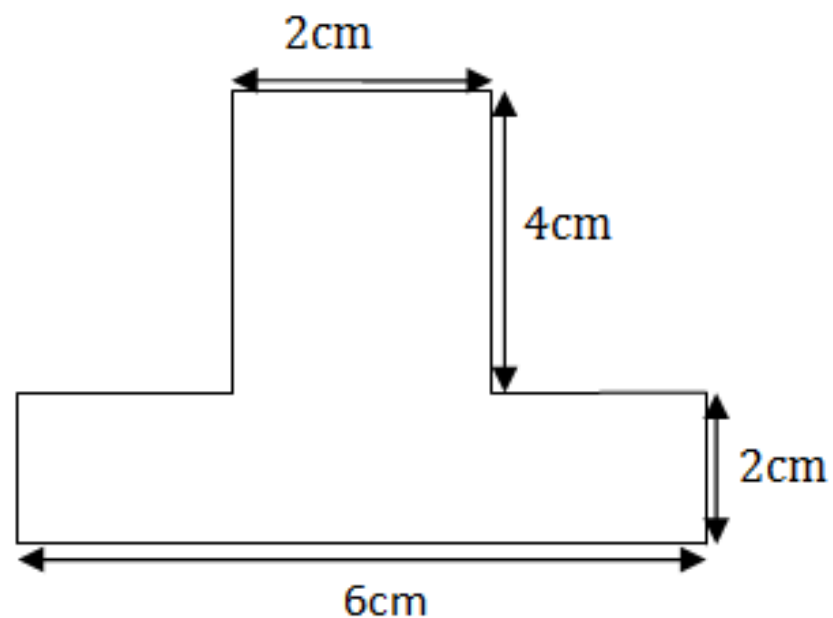
70cm²

Find the area of these shapes:

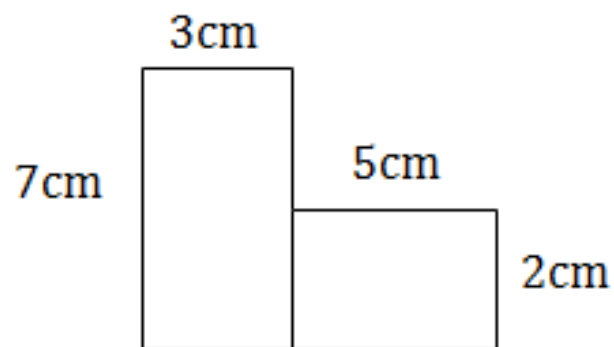
1.



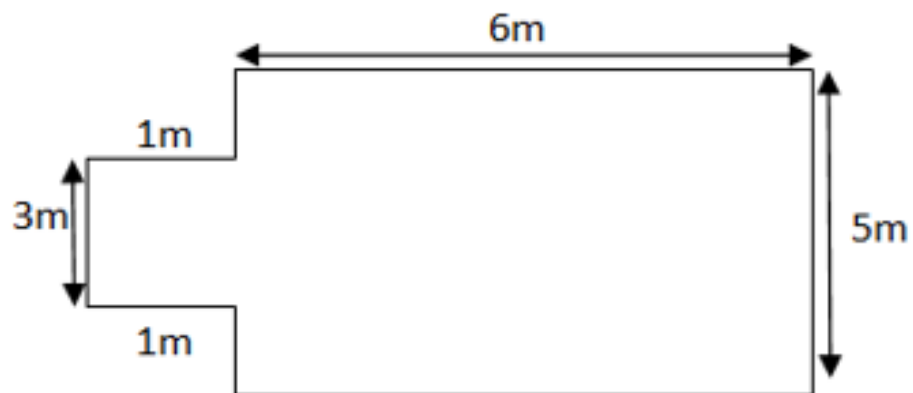
2.



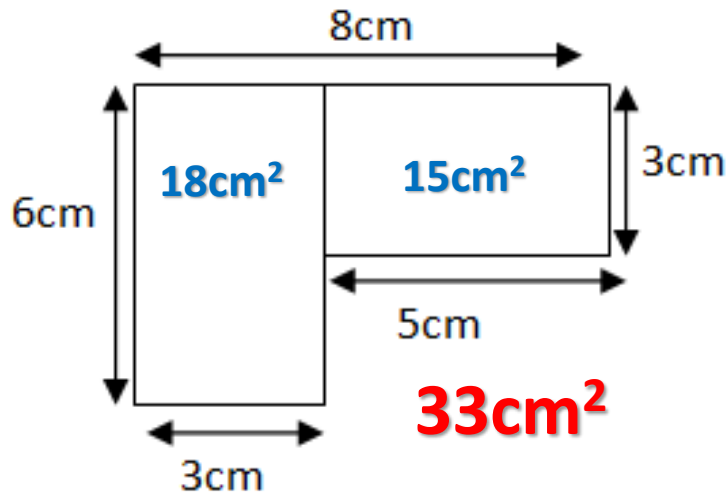
3.



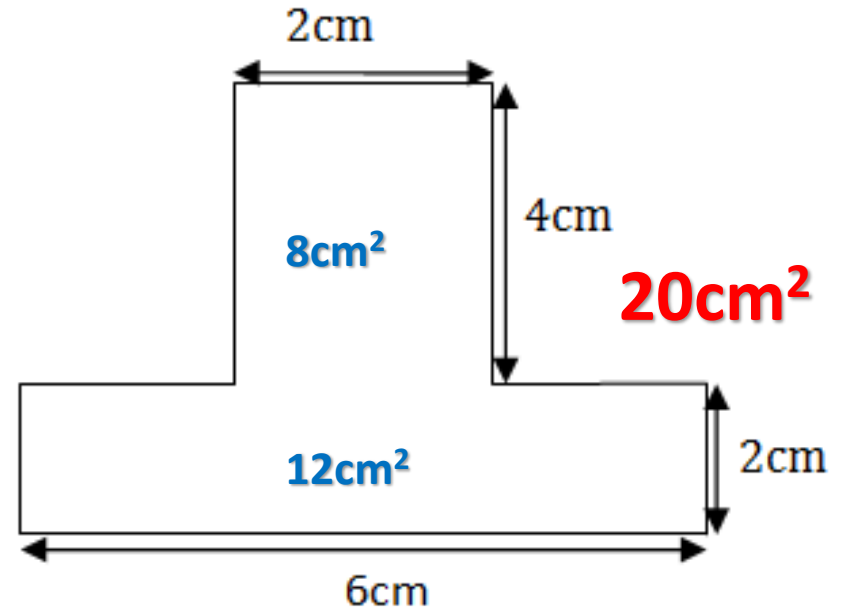
4.



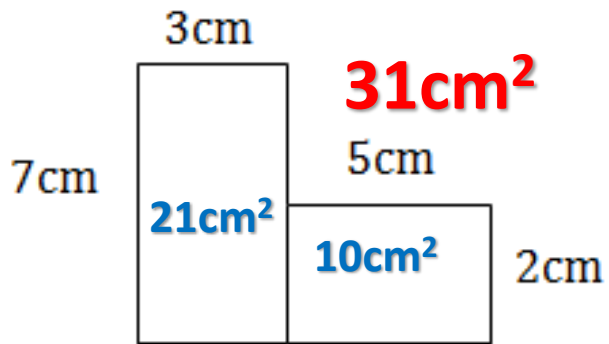
1.



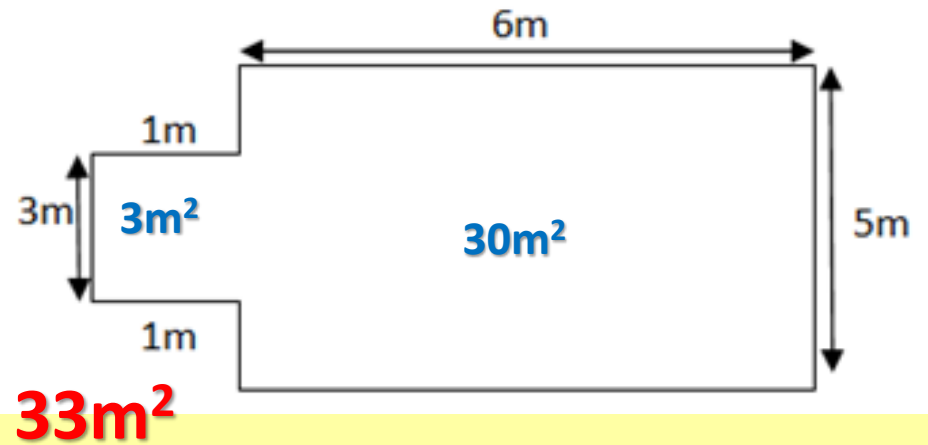
2.



3.

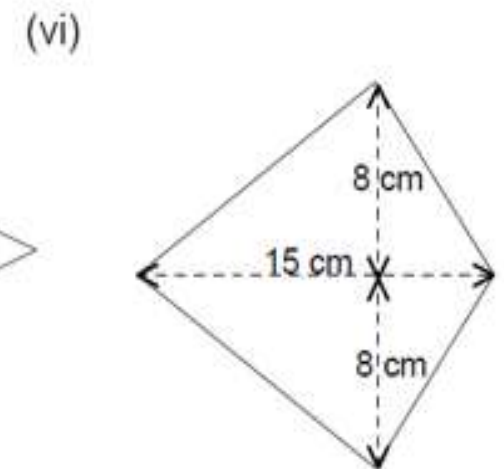
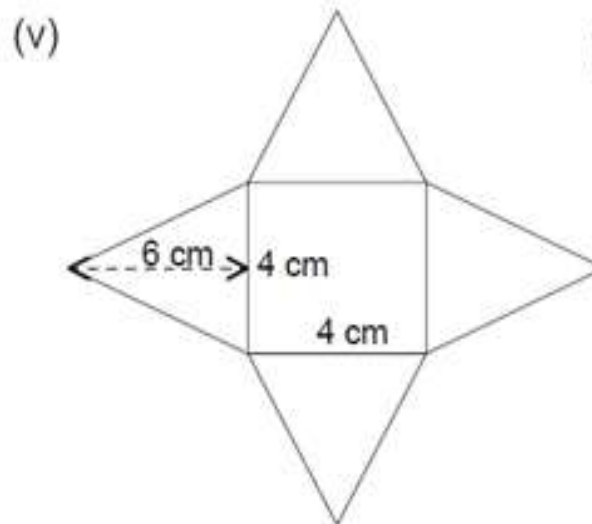
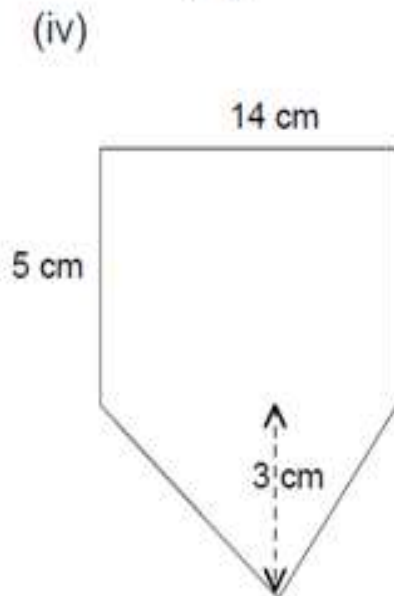
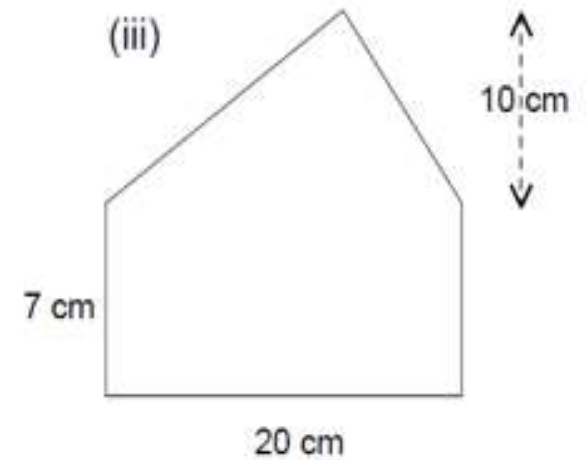
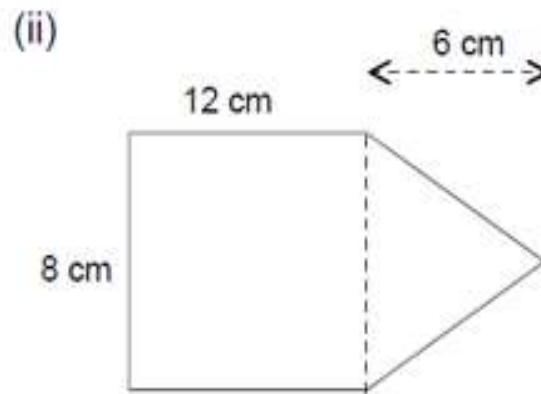
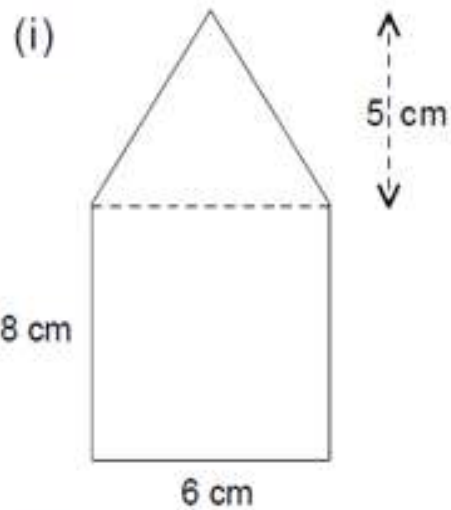


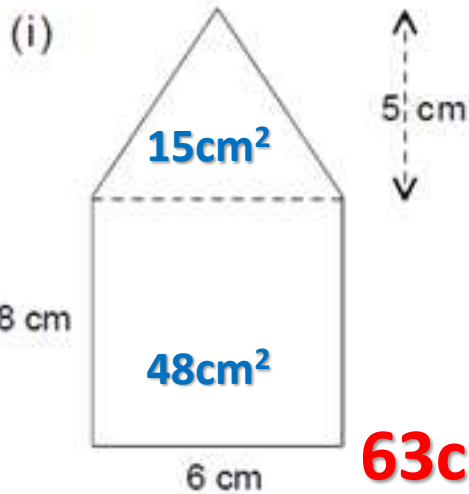
4.



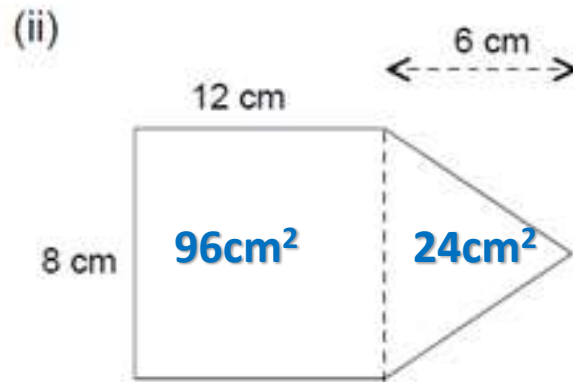
Work out the area of the following shapes: Area $\square = L \times W$

$$\text{Area } \triangle = \frac{\text{Base} \times \text{Height}}{2}$$

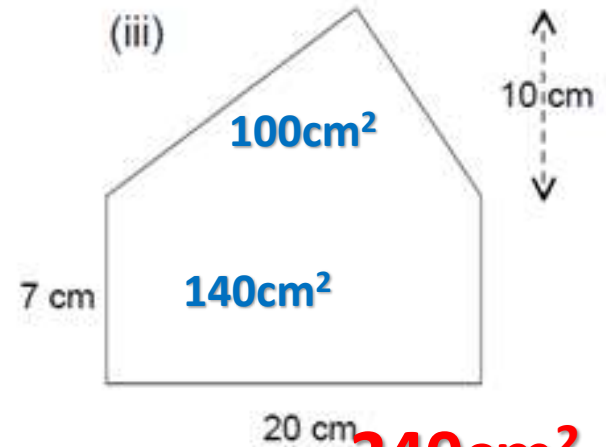




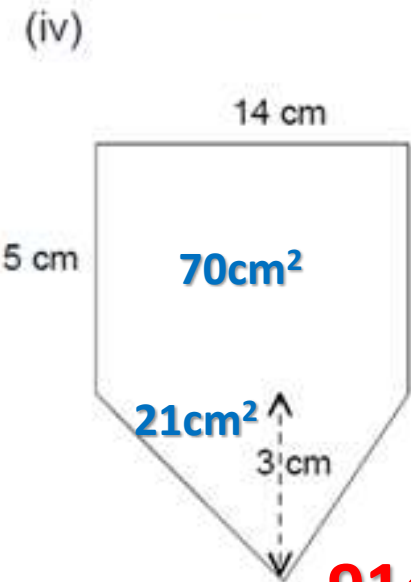
63cm^2



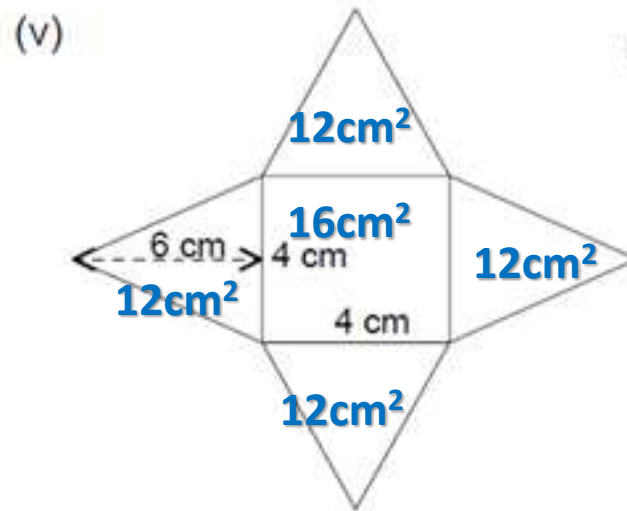
120cm^2



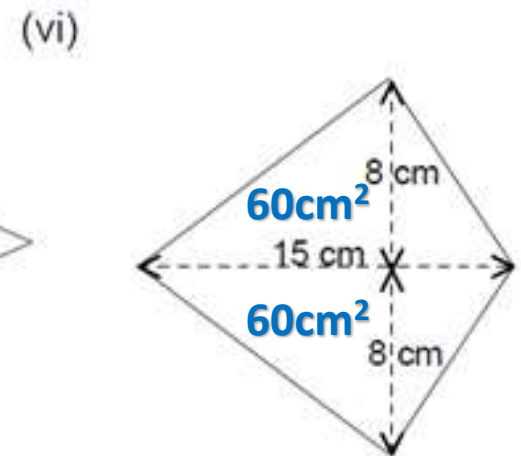
240cm^2



91cm^2

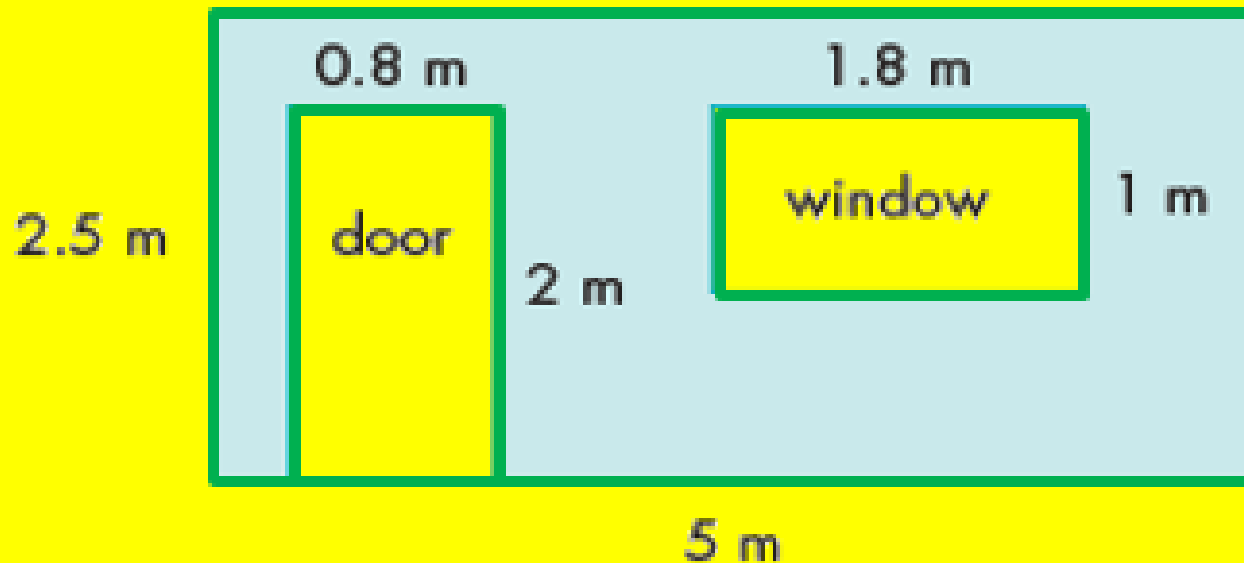


64cm^2



120cm^2

James is painting a wall as shown by the shaded region below:



He buys a tin of paint that will cover $10m^2$. Will he have enough paint?

Challenge question

Extension Question

Calculate the area of this shape:

