

PM

PARKERMATHS.COM

## Foundaon GCSE Revision

### Exam Style Quesons

Topics covered in this video...

- 👉 Area of rectangles (Problem solving)
- 👉 Area of a trapezium
- 👉 Area of compound shapes

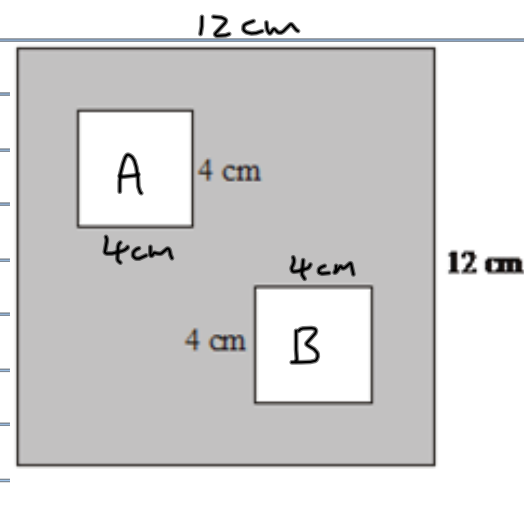
See the description below for links to the files used in this video

1. Two squares of side 4 cm are removed from a square of side 12 cm as shown.  
Work out the shaded area.

$$\begin{aligned}\text{Total area} &= 12 \times 12 \\ &= 144 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of A} &= 4 \times 4 \\ &= 16 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of B} &= 4 \times 4 \\ &= 16 \text{ cm}^2\end{aligned}$$



$$\begin{aligned}\text{Shaded area} &= 144 - 16 - 16 \\ &= \underline{\underline{112 \text{ cm}^2}}\end{aligned}$$

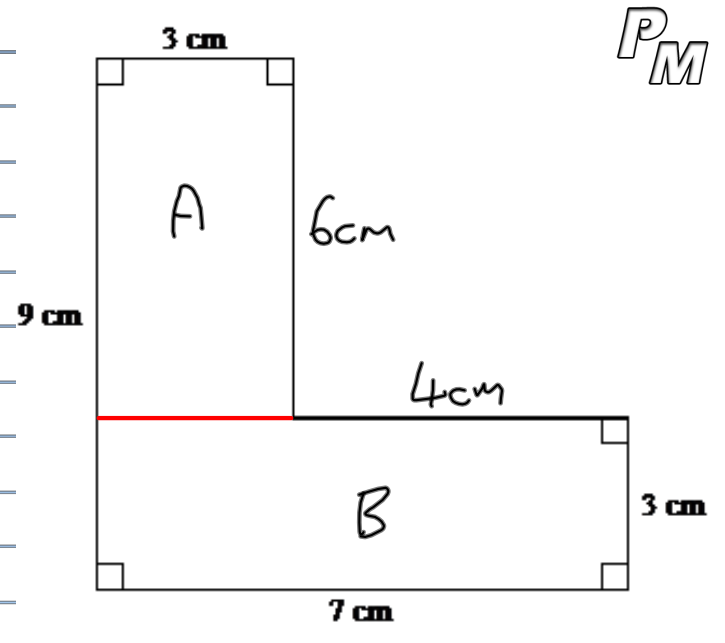
(Total 3 marks)

2. Calculate the area of this shape.  
You **must** show all your working.

$$\begin{aligned} \text{Area of A} &= 3 \times 6 \\ &= 18\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \text{Area of B} &= 7 \times 3 \\ &= 21\text{cm}^2 \end{aligned}$$

$$\begin{aligned} \text{Total area} &= 18 + 21 \\ &= \underline{39\text{cm}^2} \end{aligned}$$



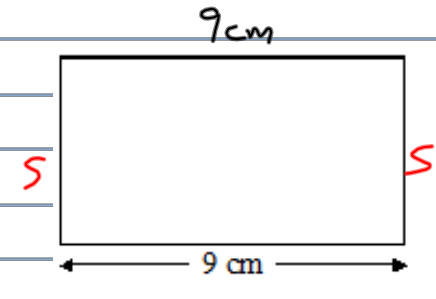
(Total 3 marks)

3. The length of a rectangle is 9 cm.

The perimeter of the rectangle is 28 cm.

Calculate the width of the rectangle.

$$P = 28$$



Perimeter - distance around the outside

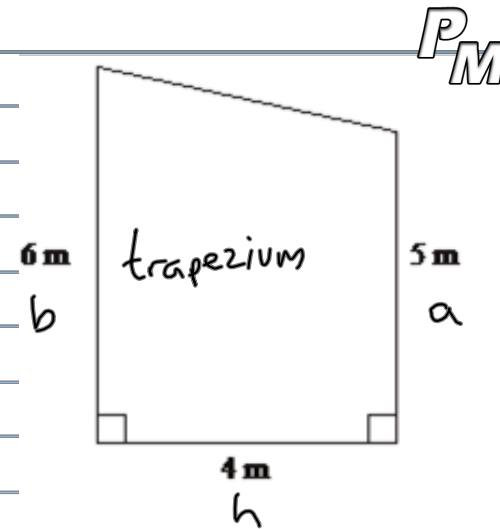
$$28 - 9 - 9 = 10 \text{ cm}$$

$$10 \div 2 = \underline{\underline{5 \text{ cm}}} = \text{width}$$

(Total 3 marks)

4. The diagram shows the side wall of a building.  
Calculate the area of the wall.

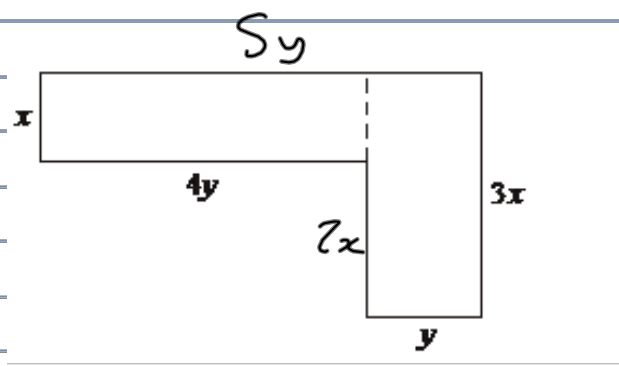
$$\begin{aligned} \text{Area} &= \frac{1}{2} (5+6) \times 4 \\ &= \frac{1}{2} \times 11 \times 4 \\ &= \underline{\underline{22\text{cm}^2}} \end{aligned}$$



(Total 4 marks)

5. This shape is made up of rectangles.  
Write down an expression, in terms of  $x$  and  $y$ ,  
for the **perimeter** of the shape.

$$P = x + 4y + 2x + y + 3x + 5y$$
$$= \underline{\underline{6x + 10y}}$$



(Total 2 marks)

6. Calculate the area of the shape.

$$\text{Area of A} = 17 \times 8 = 136 \text{ cm}^2$$

	10	7
8	80	56

$$\begin{array}{r} 80 \\ + 56 \\ \hline 136 \end{array}$$

$$\text{Area of C} = 17 \times 8 = 136 \text{ cm}^2$$

$$\text{Area of B} = 10 \times 13 = 130 \text{ cm}^2$$

$$\begin{array}{r} \text{Total area} = 136 \\ + 136 \\ + 130 \\ \hline 402 \\ \hline \end{array}$$

$$= \underline{\underline{402 \text{ cm}^2}}$$

(Total 3 marks)

