

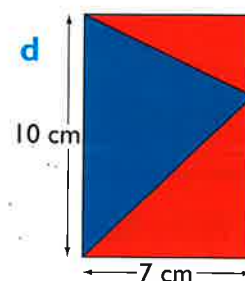
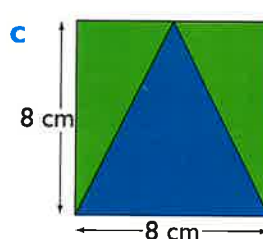
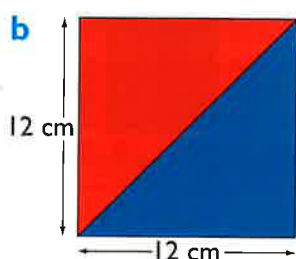
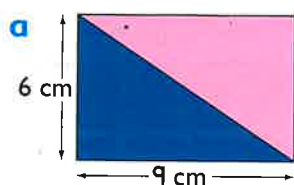
Calculating areas of triangles

- Know and use the formula for the area of a rectangle to calculate the area of right-angled triangles given the lengths of the two perpendicular sides

You can find the area of a triangle by using the formula:

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times \text{base length} \times \text{height} \\ &= \frac{1}{2} bh \end{aligned}$$

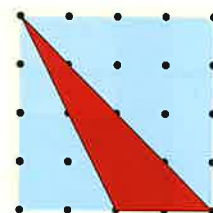
- Use the formula to calculate the area of the blue triangles.



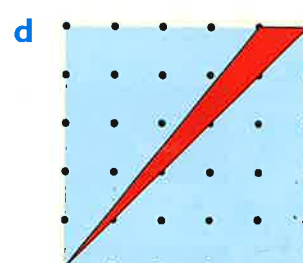
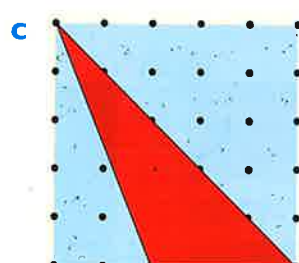
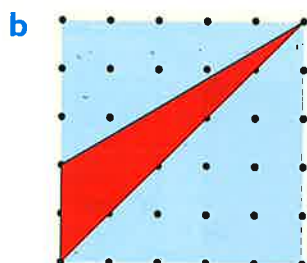
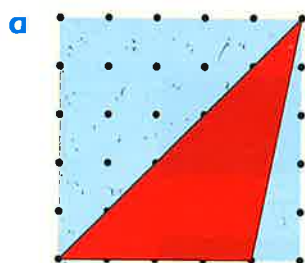
- You can find the area of the red triangle by subtracting the pieces outside the triangle from the area of the square.

$$\begin{aligned} \text{Area of square} &= 16 \text{ cm}^2 \\ \text{Area of pieces} &= 8 \text{ cm}^2 + 4 \text{ cm}^2 \\ &= 12 \text{ cm}^2 \\ \text{Area of triangle} &= (16 - 12) \text{ cm}^2 \\ &= 4 \text{ cm}^2 \end{aligned}$$

These dots are 1 cm apart.



Calculate the area in cm^2 of the red triangles. Show the steps in your working.



- Choose methods to find the area in cm^2 of these quadrilaterals.

