

Mathematics

Calculate the area of rectangles

Mr Kelsall



What is area? When is it used?

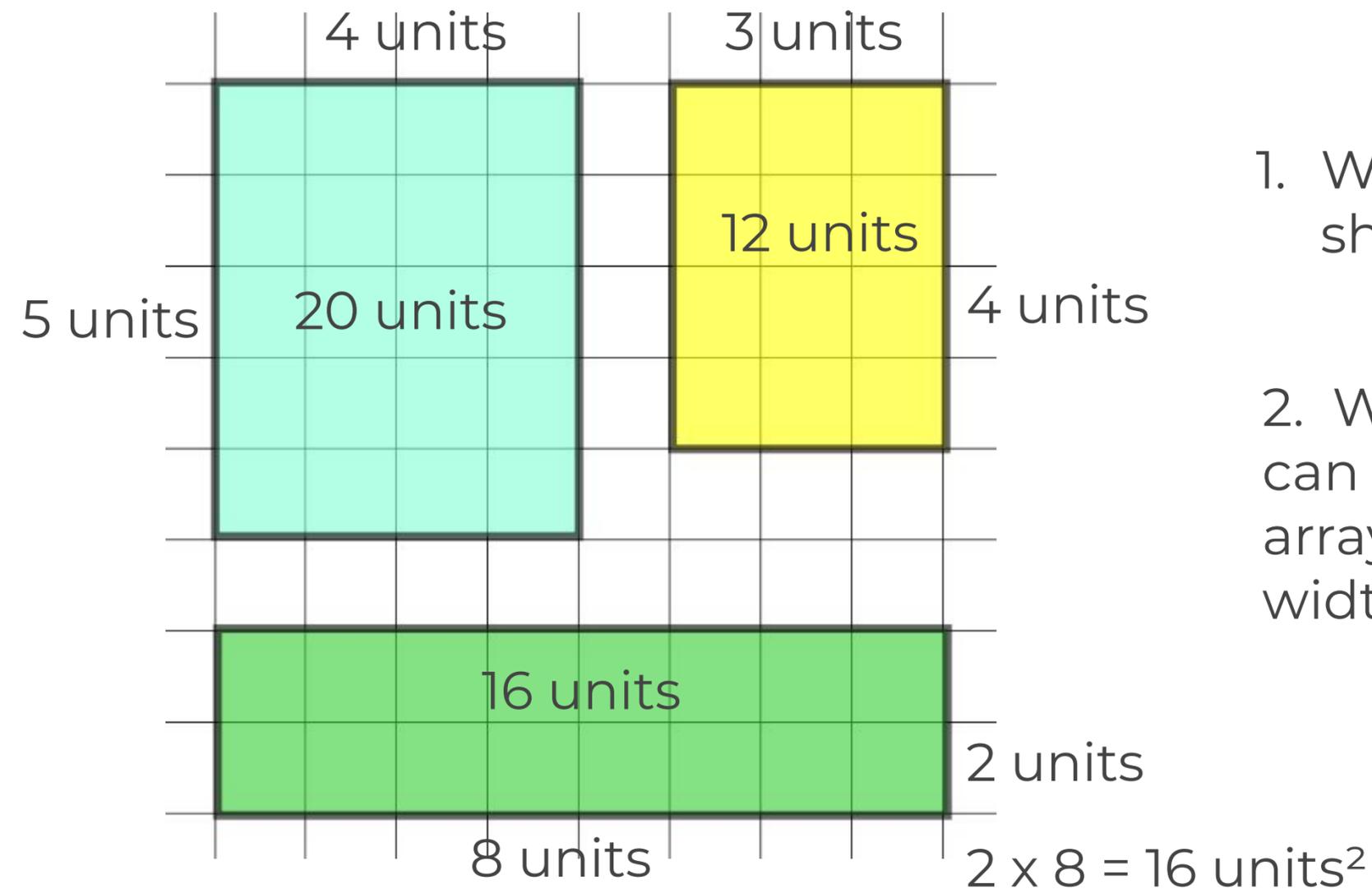
How is area different to perimeter?



How can we calculate the area of these rectangles?

$$5 \times 4 = 20 \text{ units}^2$$

$$3 \times 4 = 12 \text{ units}^2$$

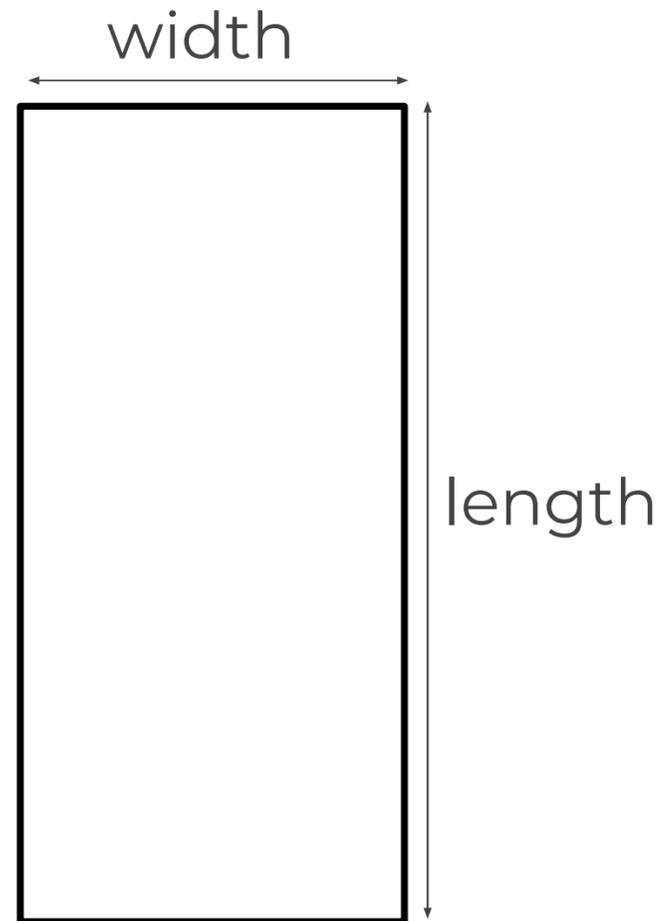


1. We could count the squares that the shape covers.
2. We could think of them as arrays and we can work out the number of squares in the array by multiplying the length by the width.



Can you apply our work on the previous slide to create a formula for the area of a rectangle?

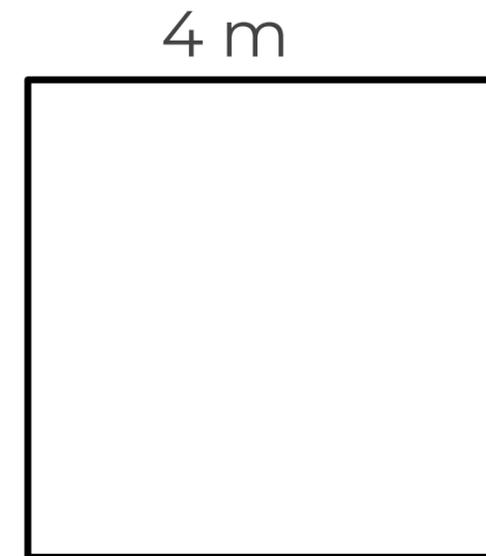
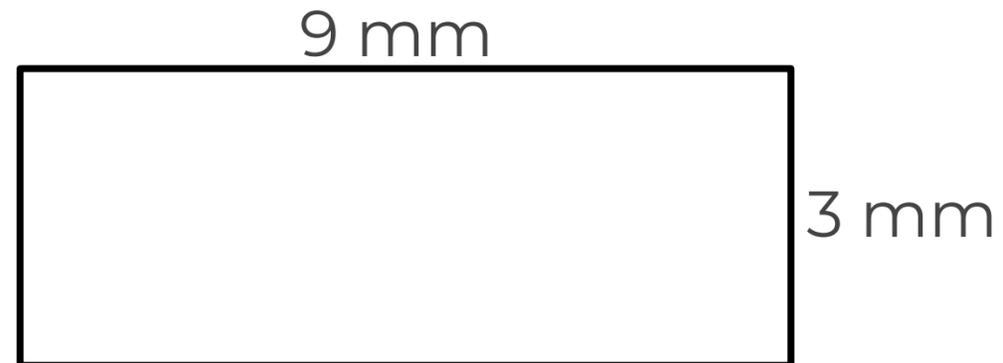
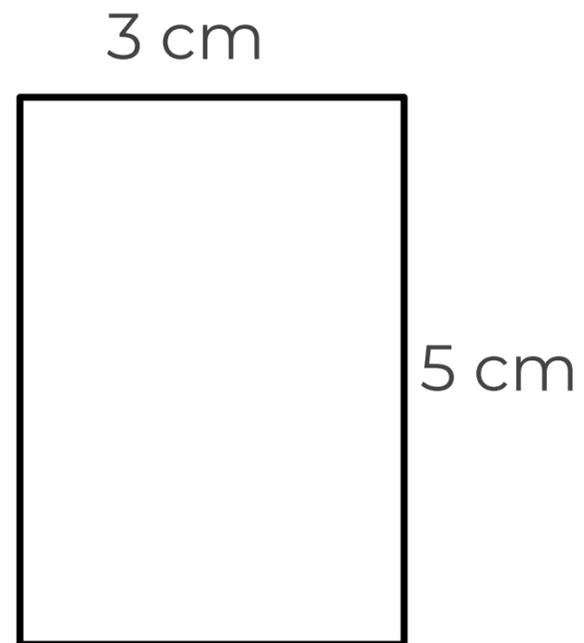
length x width = area



Calculate the area of the rectangles below

Remember to give your answer in units².

length x width = area

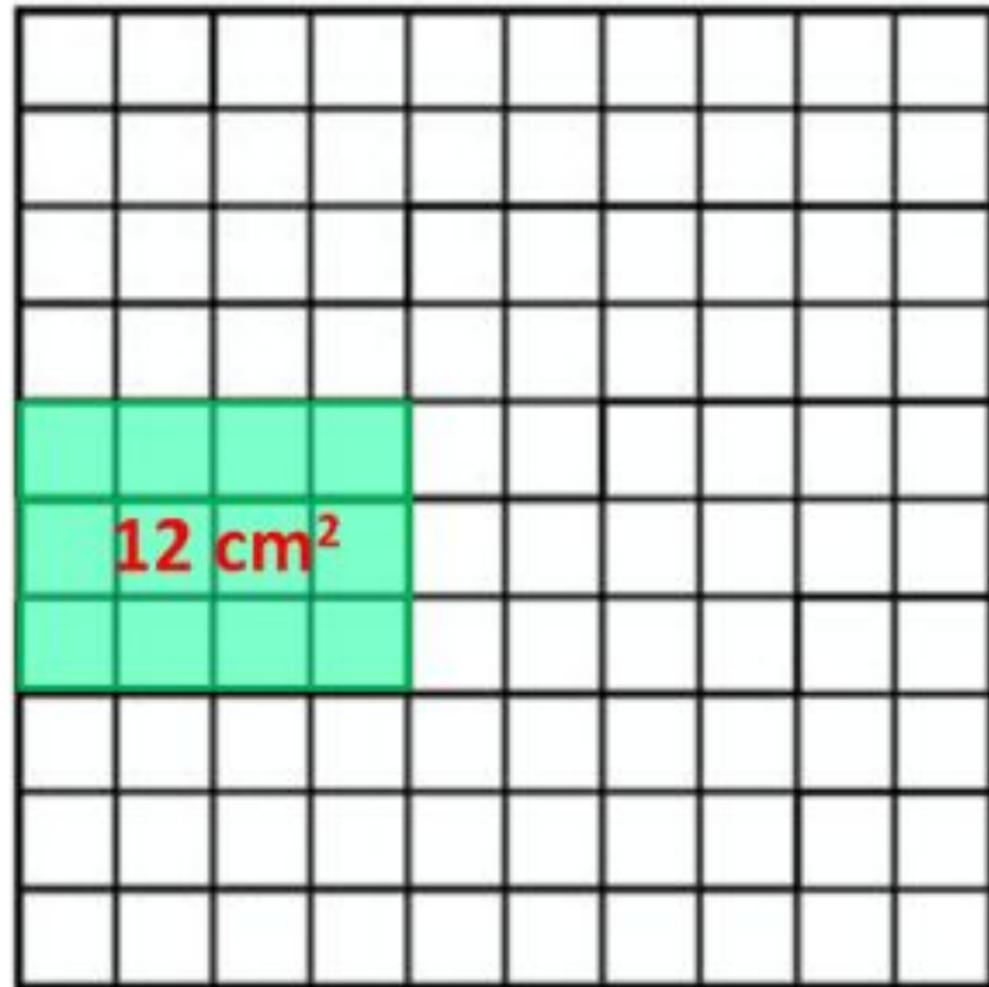


Example: $3 \times 5 = 15 \text{ cm}^2$



Independent task

Calculate the perimeter of the compound shape.



Close to 100

Roll a dice twice and draw a rectangle with side lengths matching the dice.

Record the area in cm²

Keep going until you cannot fit a rectangle in for three rolls in a row.

At the end of the game work out the area of the grid that is filled and the area that is not filled.

EXAMPLE:

