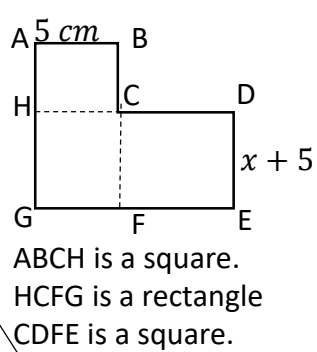
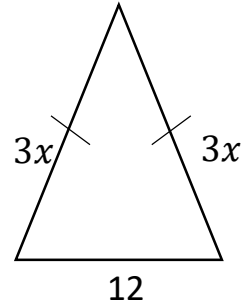


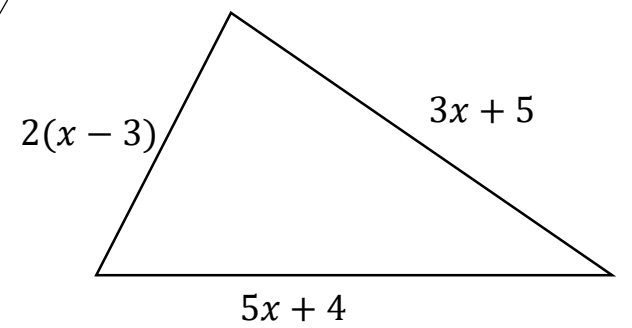
All measurements are in centimetres.
 x is an integer. The total volume of the cuboid is less than 2000 cm^3 .
 Show that $x \leq 6$



They are joined to make an L-shape.
 Show that the total area of the L-shape, in cm^2 , is $x^2 + 15x + 75$.



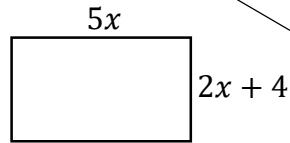
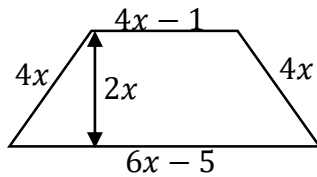
a) Find an expression for the perimeter of the shape.
 b) The perimeter is 42 cm . Work out the value of x .



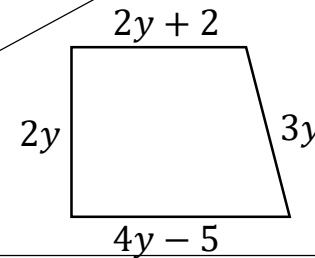
a) Write down, in terms of x , an expression for the perimeter of the triangle.

a) Find an expression, in terms of y , for the perimeter of the quadrilateral.

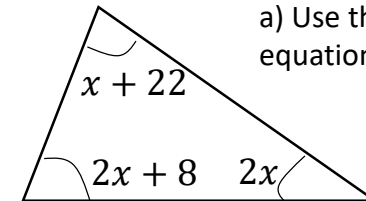
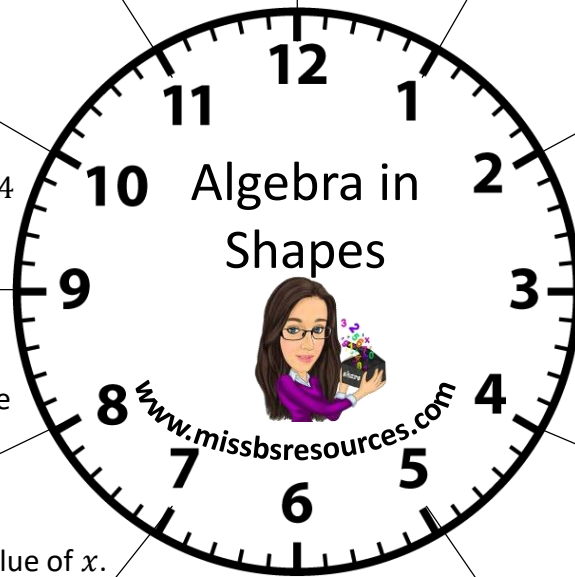
All measurements are in centimetres.
 The perimeters of these two shapes are the same. Work out the area of the trapezium.



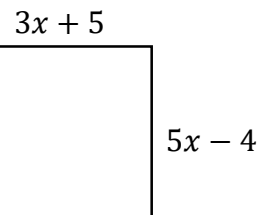
b) The perimeter of the quadrilateral is 118 cm .
 Work out the value of y .



a) Use this information to write down an equation in terms of x .



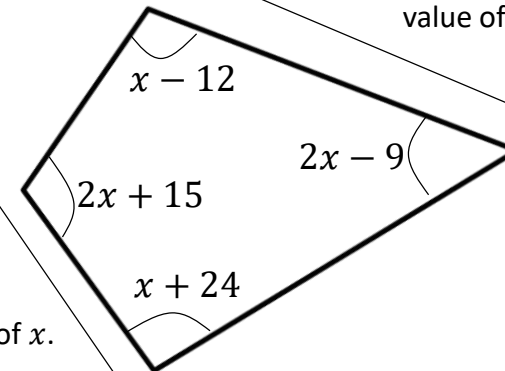
b) Use your answer to part (a) to work out the value of x .



The diagram shows a square. All the lengths are measured in centimetres.
 Use an algebraic method to find the length of one side of the square.

a) Find the value of x .

a) Use this information to write down an equation in terms of x .



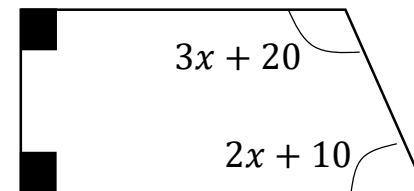
a) Use this information to write down an equation in terms of x .

b) Calculate the area of the rectangle.

a) Explain why $3x + 8 = 2x + 27$

b) Work out the value of x .

b) Calculate the perimeter of the triangle.



b) Work out the value of x .

