a) Find an expression for the perimeter of the shape.

b) The perimeter is 42 cm. Work out the value of $x$.

Algebra in Shapes

2

$(x - 3)$

$2x + 4$

$5x - 4$

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 $x$.

b) Calculate the area of the rectangle.

b) Calculate the perimeter of the triangle.

b) Work out the value of $x$.

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 $x$.

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

b) Work out the value of $x$.

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

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

The diagram shows a square. All the lengths are measured in centimetres. The total volume of the cuboid is less than 2000 cm$^3$. Show that $x \leq 6$.

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

a) Find an expression for the perimeter of the shape.

b) The perimeter is 42 cm. Work out the value of $x$.

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

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

3

$x$