

# CRAFT

Show All Your Working Out

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## Re-Teach

1.

A rectangle has a length of 8 cm and a perimeter of 24 cm. Find its width.. .

Write down the formula for the perimeter of a rectangle

Substitute the known values (perimeter and length) into the formula

Simplify the equation by performing any multiplication

Solve the resulting equation to find the width

2.

A square has a perimeter of 36 cm. Work out the length of one side.

3.

The perimeter of an equilateral triangle is 45 cm. Calculate the length of one side.

4.

A rectangle has a width of 5 m and a perimeter of 28 m. Find its length.

5.

An isosceles triangle has two sides of length 7 cm each and a perimeter of 22 cm. What is the length of the third side?

## Consolidate

1.

A rectangle has a length that is 3 cm more than its width. If the perimeter is 30 cm, form an equation and find the dimensions of the rectangle.

2.

The perimeter of a square is equal to the perimeter of a rectangle which is 12 cm long and 8 cm wide. Find the side length of the square.

3.

The length of a rectangle is twice its width. The perimeter is 60 cm. Find the area of the rectangle.

4.

The perimeter of an isosceles triangle is 40 cm. The two equal sides are each 5 cm longer than the base. Find the length of the base.

5.

A right-angled triangle has sides of length  $3x$  cm,  $4x$  cm, and  $5x$  cm. If its perimeter is 60 cm, find the length of the longest side.

## Master

1.

A farmer has 100 metres of fencing to create a rectangular pen for sheep. If the length of the pen is 10 metres more than the width, write an equation and find the maximum area that can be enclosed.

2.

A picture frame is 20 cm by 30 cm. The frame itself has a uniform width. If the total area of the frame (including the picture) is  $936 \text{ cm}^2$ , form an equation involving the perimeter of the inner picture and find the width of the frame.

3.

A garden is in the shape of a rectangle with a semi-circle on one of its shorter ends. The straight side of the semi-circle is 14 metres. The total perimeter of the whole garden is 58 metres. Taking  $\pi$  as  $22/7$ , find the length of the rectangular part of the garden.

4.

The perimeter of an isosceles triangle is 12 cm. The lengths of the sides, in centimetres, are  $2x - 1$ ,  $x + 3$ , and  $x + 3$ . Find the value of  $x$  and hence state the lengths of the three sides.

5.

A wire is bent to form a square of area  $144 \text{ cm}^2$ . The same wire is then straightened and bent to form a rectangle whose length is twice its width. Calculate the perimeter of the rectangle.