

28th December



Corbettmaths

A circular plaque of diameter 10cm is cut from a square piece of metal with side length 10cm.

What percentage of the metal is wasted?

$$\text{Square} : 100 \text{ cm}^2$$

$$\text{Circle} : \pi \times 5^2 = 78.539 \dots \text{ cm}^2$$

$$\text{Area wasted} = 21.46 \text{ cm}^2$$

$$\frac{21.46}{100} \times 100 = 21.46\%$$

Work out

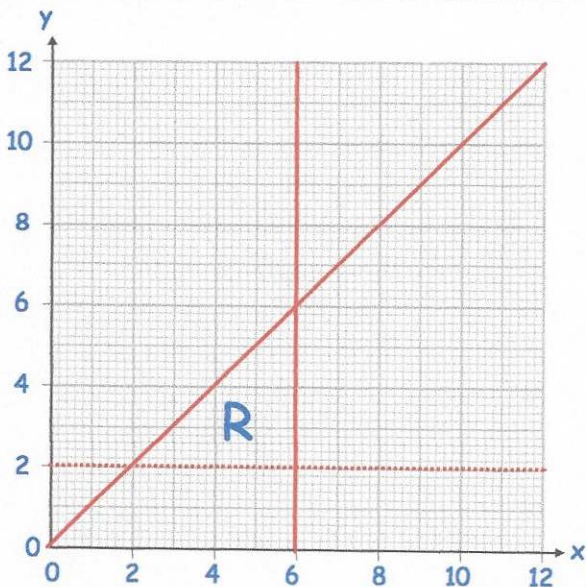
$$4^0$$

1

Evaluate

$$27^{2/3}$$

9



The region labelled R satisfies three inequalities.

State the three inequalities

$$x \leq 6$$

$$y \geq 2$$

$$y \leq x$$

The areas of two mathematically similar shapes are in the ratio 49 : 81
The length of the smaller shape is 24.5cm
Work out the length of the larger shape.

$$7 : 9 \text{ sides}$$

$$24.5 \div 7 \times 9 = 31.5$$