

11th August



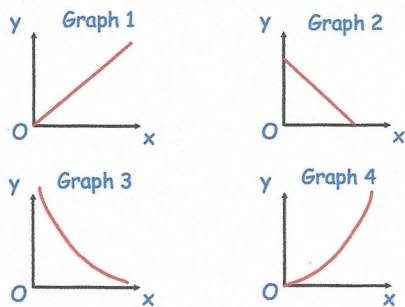
Corbettmaths

Make x the subject of

$$\sqrt[3]{\frac{x}{k}} = w$$

$$\frac{x}{k} = w^3$$

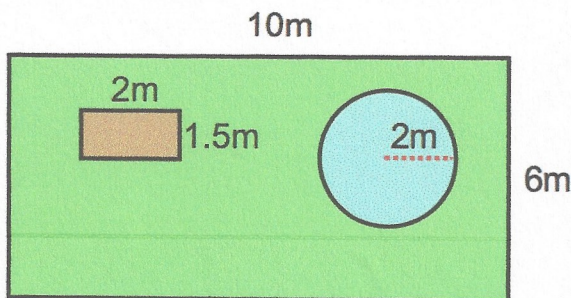
$$x = kw^3$$



One of the graphs shows that y is inversely proportional to x.

Which graph?

3



There is a circular pond that has radius 2 metres.  
The remainder of the garden is grass.  
Each bag of grass seed costs £4.60 and covers 10m<sup>2</sup>.  
Work out the total cost to re-seed the garden.

Belle wants to re-seed the grass in her garden.

The garden is 10 metres long and 6 metres wide.  $60m^2$

There is a vegetable patch that is 2 metres long and 1.5 metres long.

$$3m^2$$

$$\pi \times 2^2 = 12.566m^2$$

$$60 - (3 + 12.566) = 44.434m^2$$

5 bags (50m<sup>2</sup>)

$$5 \times 4.60 = £23$$

The sum of Rosemary's age and Hannah's age is 102 years.  
The difference between their ages is 52 years.

Hannah is younger than Rosemary.  
Find the age of each woman.

Rosemary is 77  
Hannah is 25

$$x + y = 102$$

$$x - y = 52$$

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$$2x = 154$$

$$x = 77$$