## **Scale Factor Past Paper Questions GCSE Edexcel - Calculator**

1.

Three solid shapes A, B and C are similar.

The surface area of shape **A** is 4 cm<sup>2</sup> The surface area of shape **B** is 25 cm<sup>2</sup>

The ratio of the volume of shape B to the volume of shape C is 27:64

Work out the ratio of the height of shape A to the height of shape C. Give your answer in its simplest form.

2.

Here are two similar solid shapes.



A



surface area of shape  $\mathbf{A}$ : surface area of shape  $\mathbf{B} = 3:4$ 

The volume of shape B is 10 cm<sup>3</sup>

Work out the volume of shape **A**. Give your answer correct to 3 significant figures.

**3.** 

Cone **A** and cone **B** are mathematically similar.

The ratio of the volume of cone **A** to the volume of cone **B** is 27:8

The surface area of cone A is 297 cm<sup>2</sup>

Show that the surface area of cone B is 132 cm<sup>2</sup>

4.

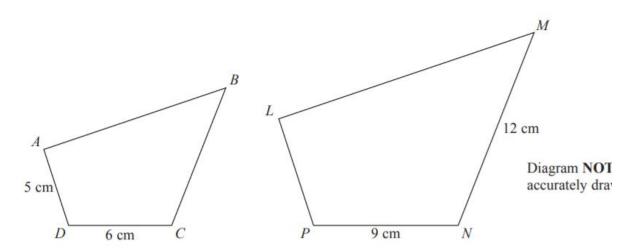
Solid **A** and solid **B** are mathematically similar.

The ratio of the surface area of solid **A** to the surface area of solid **B** is 4:9

The volume of solid **B** is 405 cm<sup>3</sup>.

Show that the volume of solid A is 120 cm<sup>3</sup>.

**5.** 



Quadrilaterals ABCD and LMNP are mathematically similar.

Angle A = angle L

Angle B = angle M

Angle C = angle N

Angle D = angle P

(a) Work out the length of LP.

(2)	
(2)	
	(2)

(b) Work out the length of BC.