



What is the size of each exterior angle of a regular pentagon?

$$360 \div 5 = 72^\circ$$

What is the size of each interior angle of a regular heptagon?

$$(7-2) \times 180 = 900^\circ$$

$$900 \div 7 = 128.571^\circ$$

Simplify $5w^{-2}y^6 \times 2w^5y$

$$10w^3y^7$$

$$w = \frac{20(a+c)}{c} \quad cw = 20(a+c)$$

Make a the subject.

$$cw = 20a + 20c$$

$$cw - 20c = 20a$$

$$a = \frac{cw - 20c}{20} \quad \text{or} \quad a = \frac{cw}{20} - c$$

Two bottles are mathematically similar.

Bottle A is 15cm tall.
Bottle B is 20cm tall. $\rightarrow \times 1.3$

The volume of Bottle A is 400cm^3

Work out the volume of Bottle B

$$400 \times 1.3^3$$

$$948.15\text{cm}^3$$

Calculate the surface area of a sphere with radius 10cm.

$$\begin{aligned} SA &= 4\pi r^2 \\ &= 4 \times \pi \times 10^2 \end{aligned}$$

$$1256.64\text{cm}^2$$