

**7th April**

Corbettmaths

Two clay models of the Statue of Liberty are mathematically similar.



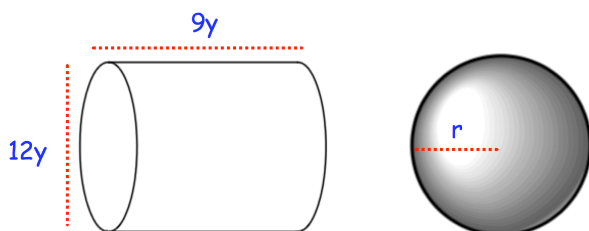
The smaller model has a height of 15cm.

The larger model has a height of 20cm.

The smaller model weighs 108g.

Work out the weight of the larger model.

Write  $x^2 - 6x + 17$  in the form  $(x - a)^2 + b$



The cylinder and sphere have the same volume

Express  $r$  in terms of  $y$

Solve

$$x^2 + y^2 = 36$$

$$\frac{1}{2}x = y + 3$$