Name: _____ 5-a-day Higher

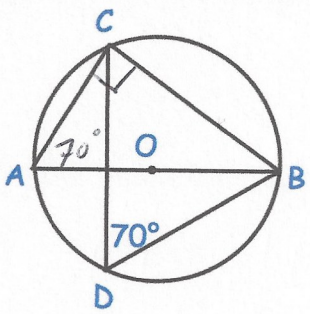
24th August

Corbettmaths

$\frac{4}{11}$

Write as a decimal.

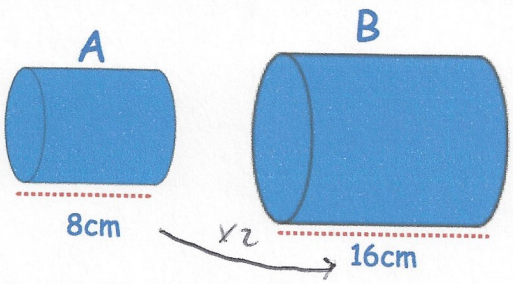
$0.36363636\ldots$



AB is the diameter. O is the centre.
Find angles

(a) CAB $70°$

(b) ABC $20°$



A and B are similar.

The volume of A is $200cm^3$.

Find the volume of B.

$200 \times 2^3 = 1600\ cm^3$

W is directly proportional to the square of M.

When W = 80, M = 2.

Work out W when M = 6.

$w \propto m^2$

$w = km^2$

$80 = k \times 2^2$

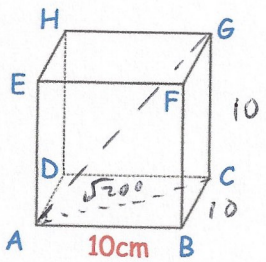
$80 = k \times 4$

$k = 20$

$w = 20m^2$

$w = 20 \times 6^2$

$w = 720$



Can a 12cm rod fit into cube ABCDEFGH?

$AC^2 = 10^2 + 10^2$

$AC = \sqrt{200} = 14.1421\ldots$

yes

$AG^2 = (\sqrt{200})^2 + 10^2$

$AG = \sqrt{300} = 17.32\ cm$