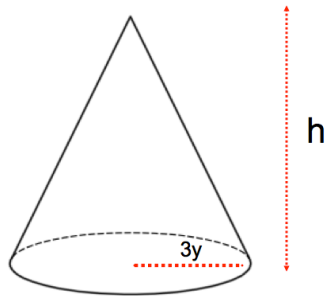
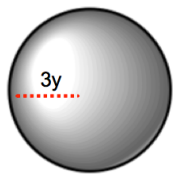


27th November



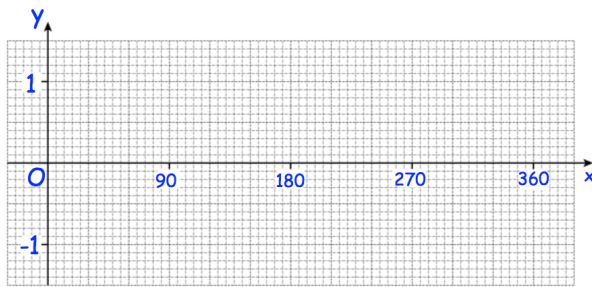
Corbettmaths

Express $x^2 + 8x + 40$ in the form $(x + a)$



The volume of the cone is twice the volume of the sphere.

Express h in terms of y .



Sketch the graph of $y = -\sin x$ for $0 \leq x \leq 360$.

Given that $a = \sqrt{3}$ and $b = \sqrt{48}$

find the value of a^2

show that $(a + b)^2 = 75$

There are 20 sweets in a box.
There are y chocolate sweets and the rest of the sweets are mints.

Florence takes out two sweets, at random, from the box.

Find an expression, in terms of y , for the probability that Florence takes one sweet of each flavour.