

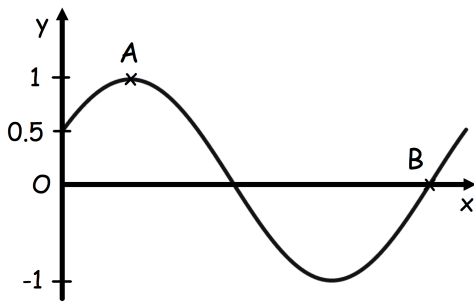


The point (12, 5) lies on a circle with centre (0, 0)

Write down the coordinates of another three points on the circle.

Expand and simplify

$$(x - 3)^3$$



Shown is the curve

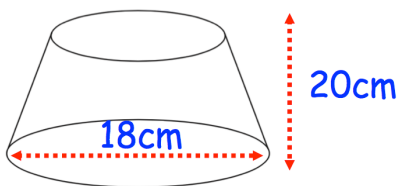
$$y = \sin(x + 30^\circ)$$

Write down the coordinates of A and B

There are 20 sweets in a box.  
There are  $y$  lemon sweets and the rest of the sweets are orange.

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

Find an expression, in terms of  $y$ , for the probability that Florence takes two lemon sweets.



Shown is a frustum of a cone that had a perpendicular height of 40cm

Calculate the surface area of the frustum