16th February **Higher Plus 5-a-day**

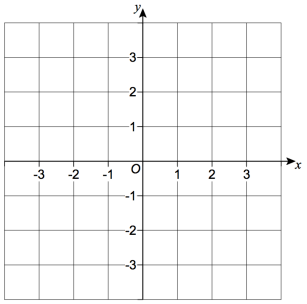
Corbettmaths

The cosine rule is

$a^2 = b^2 + c^2 - 2bc \cos A$

Make cos A the subject.

Sketch $x^2 + y^2 = 2.25$



A bag contains 7 red sweets and 5 green sweets.
Kelly removes 3 sweets, one at a time, without replacement.

Find the probability that she does not choose 3 sweets that are the same colour.

Show that the equation $x^3 + x = 20$ has a solution between 2 and 3.

Starting with $x_0 = 2$
use the iterative formula
$x_{n+1} = \sqrt[3]{20 - x_n}$
four times to find an estimate for the solution of $x^3 + x = 20$ that lies between 2 and 3.