16th March **Higher 5-a-day**

Corbettmaths

A lock has four rotating wheels, each with numbers 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9.

How many different combinations can be set?

$10 \times 10 \times 10 \times 10$

10000

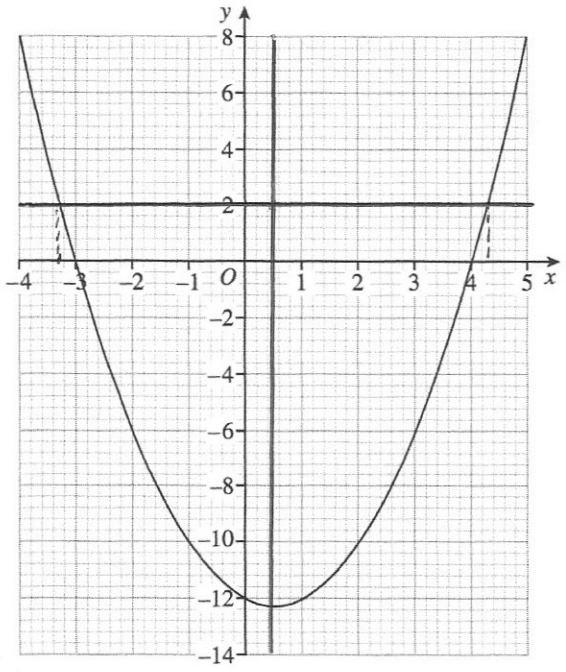
An average orange weighs 130g. UB 135g
The net weighs 10g. UB 10.5g
Both weights are correct to two significant figures.

A net contains 8 oranges.

Work out the upper bound for the weight of the net of oranges.

$8 \times 135 + 10.5$

1090.5g



Shown is the graph $y = x^2 - x - 12$

Using the graph, estimate the roots of $x^2 - x - 12 = 2$

$x = -3.3$ or $x = 4.3$

Write down the equation of the line of symmetry for the graph $y = x^2 - x - 12$

$x = 0.5$

Write the cube root of y in index form

$y^{\frac{1}{3}}$