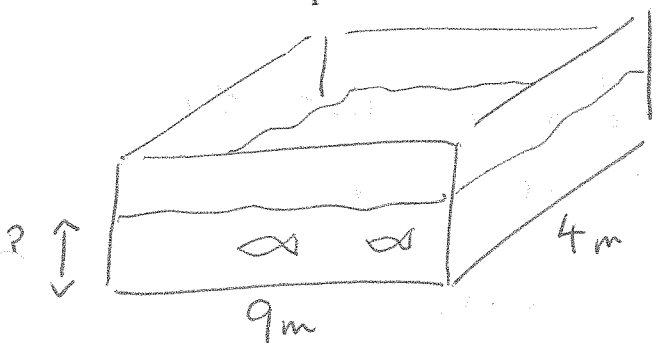
M2 = 16 days to go!

4 A fish tank is a cuboid.

The tank has a length of 9 metres, a width of 4 metres and a height of 3 metres.

The fish tank is filled with $99\,m^3$ of water.
What is the depth of water in the tank?



$9 \times 4 \times ? = 99$

$36 \times ? = 99$

$? = 2.75$

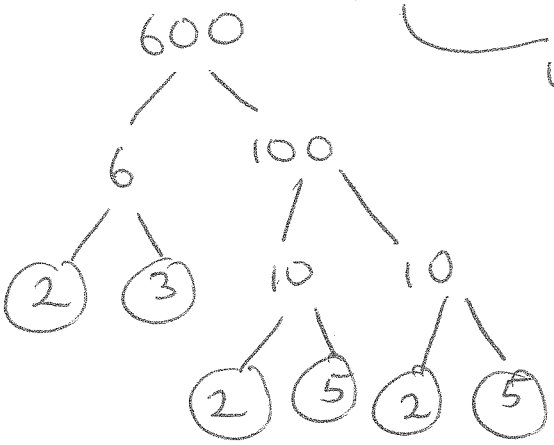
Answer 2.75 metres [2]

24 Write 600 as a product of prime factors.

Express your answer in index notation.

primes 2, 3, 5, 7, 11, 13

use indices



Answer $2^3 \times 3 \times 5^2$ [3]

$600 = 2 \times 2 \times 2 \times 3 \times 5 \times 5$

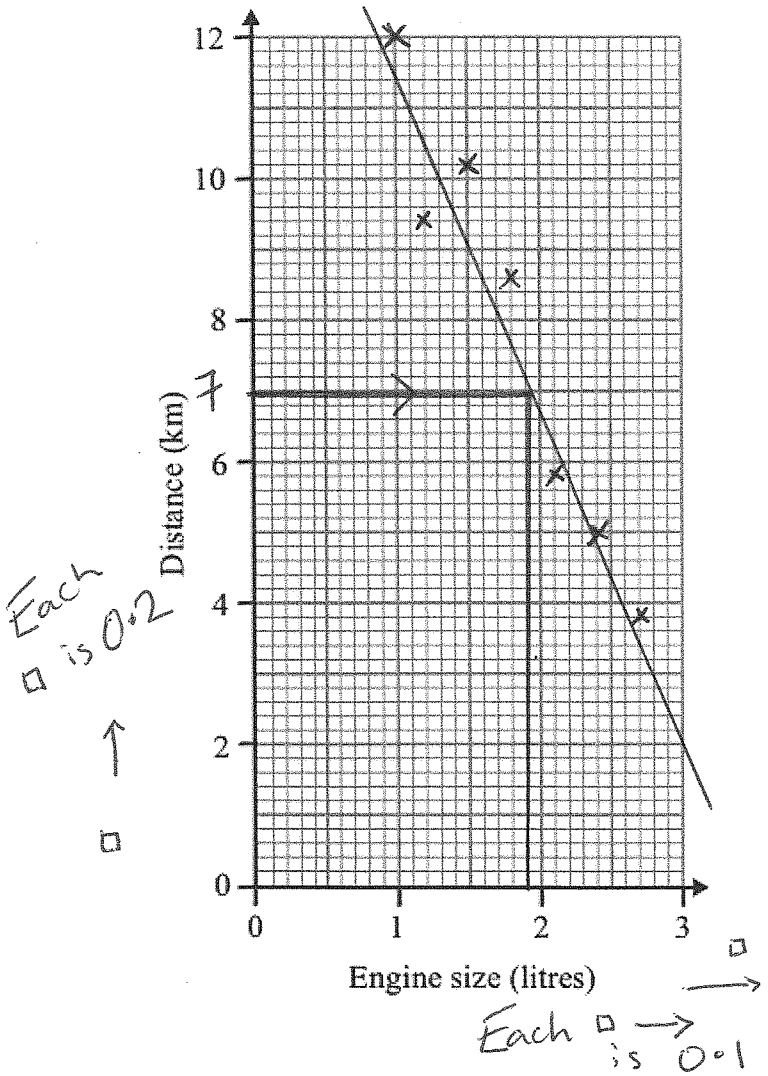
$2^3 \times 3 \times 5^2$

12 The table shows the engine size (litres) of different cars and the distance (km) that the cars can travel on one litre of petrol.

Engine size	1.0	1.8	2.4	1.2	2.1	1.5	2.7
Distance	12	8.6	5	9.4	5.9	10.2	3.8

Should be 8 points

(a) Draw a scatter graph. [2]



Line of best fit
½ points on each side

(c) Another car travels 7 km on one litre of petrol. Use your line of best fit to estimate the engine size of this car.

Answer 1.9 litres [1]

(d) Describe the correlation in this scatter graph.

Answer Negative [1]