Day 288	B Tier 10-a-day
1 A rectangular pond is 8 m by 6 m. There is a path of width 2 m all the way round the outside of the pond. Work out the area of the path.	
2 Here is a list of numbers. 68, 81, 78, 51, 98, 94, 19, 27 From the list, write down (a) a square number (b) a prime number	
3 The probability that a train is on time is 50%. Work out the probability that a train is not on time.	
4 The bearing of M from L is 116°. Work out the bearing of L from M.	
5 f(x) = 2x + 3 (a) Work out f(6) (b) Solve f(x) = 21	

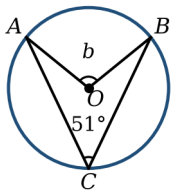
Day 288 **B Tier 10-a-day**

6 Write these numbers in order of size.
Start with the smallest.
1.6×10^2, 0.047, 8.6×10^{-5}, 0.28

7 Matchsticks are used to make a row of hexagons.
1 hexagon needs 6 matchsticks, 2 hexagons need 11 and 3 hexagons need 16.
(a) Find an expression, in terms of n, for the number of matchsticks needed for n hexagons.
(b) Dan uses 151 matchsticks to make a row.
How many hexagons are in his row?

8 Priya is paid £14.50 per hour for a 37 hour week. (Calculator)
Overtime is paid at time and a half.
In one week she works 6 hours of overtime.
Work out her total pay for that week.

9 A, B and C are points on a circle, centre O.
Angle ACB = 51°.
Work out the size of angle AOB, marked b.
Give a reason for your answer.
The diagram is not drawn accurately.



10 The pie chart shows the favourite choices of 360 people.
The angle for PE is not shown.
Work out how many people chose PE.

