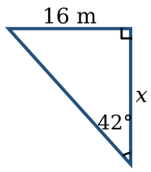
Day 150	B Tier 10-a-day
1 Work out (a) $5 \times (5 + 30) \div 5$ (b) $7^2 - (17 - 9) \times 2$	
2 The bearing of Q from P is 171°. Work out the bearing of P from Q.	
3 Simplify fully (a) $y^6 \div y^4$ (b) $a^2 \times a^4$	
4 There are 8.1×10^3 cells in a sample. The number triples every day. How many are there after 4 days? Give your answer in standard form.	
5 The first term of a sequence is 2. The term-to-term rule is: multiply by 3 and then add 2. Work out the 4th term.	

Day 150	B Tier 10-a-day
6 A new van costs £6000. (Calculator) Its value falls by 2% each year. Work out its value after 3 years. Give your answer to the nearest pound.	
7 Sam tests a biased coin landing on tails. In 500 trials it happens 180 times. Estimate how many times it will happen in 600 trials.	
8 The equation $x^3 + 2x = 58$ has a solution between 3 and 4. (Calculator) Use trial and improvement to find this solution. Give your answer correct to 1 decimal place.	
9 Find the length of x. (Calculator) Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
10 A bag contains 4 mint sweets and 6 toffee sweets. Dev takes one at random and does not replace it, then takes a second. Work out the probability that both are mint.	