Day 185	B Tier 10-a-day
1 Write down the number of faces and edges of a square-based pyramid.	
2 Work out (a) 821 × 7 (b) 1288 ÷ 23	
3 n is an integer. Write down all the values of n for which $-1 \leq n \leq 5$	
4 In a survey, 48 people chose hockey. There were 120 people in the survey altogether. The results are shown in a pie chart. Work out the angle for hockey.	
5 A triangle has sides of length 12 m, 9 m and 14 m. Is the triangle right-angled? You must show your working.	

Day 185	B Tier 10-a-day

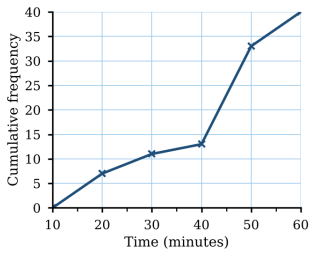
6 The probability that a football team wins a match is $\frac{1}{4}$.

Work out how many times you would expect this to happen in 100 matches.

7 The price of a laptop is £200.
The price is first increased by 30%, then the new price is reduced by 5%.
(a) Work out the final price.
(b) Work out the overall percentage increase in the price.

8 The equation $x^3 - 2x = 61$ has a solution between 4 and 5. (Calculator)
Use trial and improvement to find this solution.
Give your answer correct to 1 decimal place.

9 The cumulative frequency graph shows the times taken by 40 students to complete a puzzle.
(a) Use the graph to estimate the median.
(b) Work out an estimate for the interquartile range.



10 Here are the first four terms of a sequence.
2, 5, 8, 11
Find an expression, in terms of n, for the nth term of this sequence.