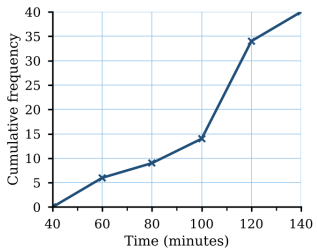
Day 2	B Tier 10-a-day
1 7 cakes cost £1.75. Work out the cost of 12 cakes.	
2 Expand and simplify $5(x + 5) - 3(x - 6)$	
3 A rectangle is 11 m long and 6 m wide. It is enlarged by scale factor 2. (a) Write down the length and width of the enlarged rectangle. (b) Work out the perimeter of the enlarged rectangle.	
4 Work out (a) $\frac{4}{5} + \frac{5}{8}$ (b) $\frac{3}{4} - \frac{2}{9}$ Give each answer in its simplest form.	
5 Here are the amounts needed to make a smoothie for 6 people. 480 g of strawberries, 360 ml of juice Work out the amounts needed to make a smoothie for 12 people.	

Day 2	B Tier 10-a-day
6 Write each answer as a single power of 4. (a) $4^8 \times 4^6$ (b) $4^{14} \div 4^6$	
7 A ladder 6 m long leans against a vertical wall. (Calculator) The ladder makes an angle of 72° with the horizontal ground. Work out how high up the wall the ladder reaches. Give your answer correct to 1 decimal place.	
8 Here are the first four terms of a sequence. 2, 11, 20, 29 Find an expression, in terms of n, for the nth term of this sequence.	
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 is an iteration formula. $x_{n+1} = \sqrt{3x_n + 7}$ $x_0 = 3$ (a) Work out x_1 (b) Work out x_2. Give your answer correct to 3 decimal places. (Calculator)	