Day 196	B Tier 10-a-day
1 Simplify $3p + 3q - 5p + 3q$	
2 The ratio of adults to children at a concert is 9 : 2. What fraction of them are children?	
3 A prism has a cross-section with area 58 cm^2. The length of the prism is 16 cm. Work out the volume of the prism.	
4 Priya has $\frac{7}{10}$ of £40. Ella has 40% of £60. Who has more money? You must show your working.	
5 Solve $6x - 5 = 9$ Give your answer as a fraction in its simplest form.	

Day 196	B Tier 10-a-day
6 Village C has a population of 1,000. Its area is 5 km^2. Work out the population density. Give your answer in people per km^2.	
7 A triangle has sides of length 19 cm, 16 cm and 12 cm. Is the triangle right-angled? You must show your working.	
8 The number x is rounded to the nearest 100. The result is 8400. Write down the error interval for x.	
9 A new car is worth £20,000. (Calculator) Each year its value falls by 25% of its value at the start of that year. Work out the value of the car after 2 years.	
10 A cone has base radius 4 m and vertical height 8 m. (Calculator) Volume of a cone = $\frac{1}{3}\pi r^2 h$ Work out the volume of the cone. Give your answer correct to 1 decimal place.	