Day 48	B Tier 10-a-day
1 Write down the number of faces and vertices of a triangular-based pyramid.	
2 Dan is n years old. Dan's sister is 5 years older. Dan's father is 4 times as old as Dan. (a) Write an expression, in terms of n, for the age of Dan's sister. (b) Write an expression, in terms of n, for the sum of the ages of all three people. Give your answer in its simplest form.	
3 Leo types at 30 words per minute. (a) How many words does Leo type in 12 minutes? (b) How long does Leo take to type 1080 words?	
4 What fraction of 1 hour is 45 minutes? Give your answer in its simplest form.	
5 F is directly proportional to m. When m = 6, F = 48. Find the value of m when F = 112.	

Day 48	B Tier 10-a-day
6 The time of a race is 25.9 seconds, correct to 1 decimal place. Write down the error interval for the time. Use the letter t.	
7 A car travels 8 km on each litre of petrol. (Calculator) Petrol costs £1.60 per litre. Work out the cost of the petrol for a journey of 320 km.	
8 The area of a circle is 225π m^2. Work out the radius of the circle.	
9 Here is an iteration formula. $x_{n+1} = 6 + \frac{15}{x_n}$ $x_0 = 3$ (a) Work out x_1 (b) Work out x_2. Give your answer correct to 3 decimal places. (Calculator)	
10 The length of a rectangle is 27 cm and its width is 18 cm. Both measurements are correct to the nearest cm. Work out the upper bound for the perimeter of the rectangle.	