Day 286	B Tier 10-a-day
1 Here are the numbers of runs scored by a batter. 51, 55, 44, 63, 64, 43, 49, 56 (a) Find the median. (b) Work out the range.	
2 A jug holds 1.5 litres of juice. Each glass holds 125 ml. How many glasses can be filled from the jug?	
3 A cuboid has volume 120 cm^3. The length of the cuboid is 8 cm and the width is 3 cm. Work out the height of the cuboid.	
4 A new van costs £20,500. (Calculator) Its value falls by 4% each year. Work out its value after 3 years. Give your answer to the nearest pound.	
5 A theme park sells adult tickets and child tickets. 2 adult tickets and 1 child ticket cost £48. 3 adult tickets and 1 child ticket cost £67. Work out the cost of one adult ticket and the cost of one child ticket.	

Day 286 **B Tier 10-a-day**

6 A table top is 15 cm long and 8 cm wide.
Work out the length of a diagonal of the table top.

7 A stratified sample of 30 students is taken from the 300 students in the table.
Work out how many students should be sampled from Year 7.

Group	Students
Year 7	60
Year 8	90
Year 9	150

8 An open box (no lid) is a cuboid measuring 14 cm by 5 cm by 2 cm.
The base is 14 cm by 5 cm.
Work out the total area of card needed to make the box.

9 Sophie is paid £14 per hour for a 35 hour week. (Calculator)
Overtime is paid at time and a half.
In one week she works 4 hours of overtime.
Work out her total pay for that week.

10 Show that $(2n + 8)^2 - 64$ is a multiple of 4 for any whole number n.