Day 122	B Tier 10-a-day
1 Write these in order of size. Start with the smallest. $\frac{2}{5}$, 28%, 0.2, 60%	
2 Solve $6(x + 1) = 0$	
3 A train ticket costs £400. The price goes up by 30%. (a) Work out the new price. (b) A car is worth £2500. Its value goes down by 20% in a year. Work out its new value.	
4 Here are the first four terms of a sequence. 47, 43, 39, 35 Find an expression, in terms of n, for the nth term of this sequence.	
5 The stem and leaf diagram shows 13 values. (a) Find the median. (b) Work out the range. **Stem** **Leaf** 3 | 0 2 4 6 4 | 0 3 4 5 8 5 | 2 5 6 7 Key: 3 | 0 means 30	

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6 Write these numbers in order of size. Start with the smallest. 7.5×10^{-3}, 7900, 9.8×10^{-1}, 68	
7 60 deer in a lake are caught, tagged and returned to the lake. Later, a sample of 40 deer is caught and 3 of them are tagged. Estimate the total number of deer in the lake.	
8 Work out the gradient of the straight line that passes through the points (2, −2) and (0, 7).	
9 In triangle PQR, PQ = 17 m, QR = 14 m and angle PQR = 140°. (Calculator) Work out the area of the triangle. Give your answer correct to 1 decimal place.	
10 The circumference of a circle is 47 cm. (Calculator) Work out the diameter of the circle. Give your answer correct to 1 decimal place.	