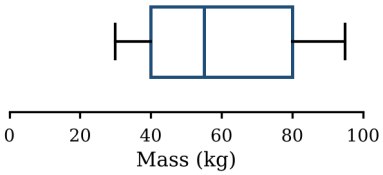
Day 74	A Tier 10-a-day
1 Write these numbers in order of size, starting with the smallest. 42% $\frac{7}{8}$ 0.93 37%	
2 A circle has radius 6 cm. Work out, in terms of π, (a) the circumference, (b) the area.	
3 y is directly proportional to the cube of x. When x = 3, y = 162. (a) Find a formula for y in terms of x. (b) Work out the value of y when x = 5.	
4 Bus A leaves a bus station every 18 minutes. Bus B leaves the same station every 12 minutes. Both buses leave together at 6:00 am. At what time will they next leave together?	
5 Solve $\frac{5x - 4}{4} = \frac{4x - 5}{5}$	

Day 74	A Tier 10-a-day
6 Here are four fractions: $\frac{4}{5}$ $\frac{3}{11}$ $\frac{3}{8}$ $\frac{21}{24}$ Which one of these fractions is equal to a recurring decimal?	
7 A is the point $(-5, 4)$ and B is the point $(-1, 6)$. Find the equation of the perpendicular bisector of AB.	
8 The box plot shows the masses, in kg, of the parcels in delivery A. (a) Write down the median and the interquartile range. For delivery B the median is 70 and the interquartile range is 45. (b) Compare the distributions of the two deliveries.  	
9 Boat P sails 21 miles from a harbour on a bearing of 145°. Boat Q sails 23 miles from the same harbour on a bearing of 200°. (Calculator) Work out the distance between the two boats. Give your answer to 3 significant figures.	
10 A bag contains red counters and blue counters in the ratio 5 : 6. 6 more blue counters are added to the bag. The ratio of red counters to blue counters is now 2 : 3. How many counters were in the bag at the start?	