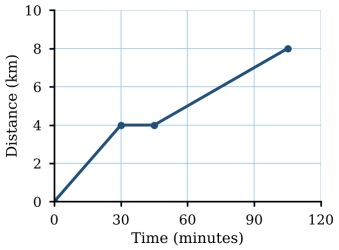
Day 304	B Tier 10-a-day
1 Write down all the common factors of 6 and 18.	
2 Work out the sum of the interior angles of a polygon with 20 sides.	
3 The exchange rate is £1 = $1.35. (Calculator) (a) Change £80 to dollars. (b) Change $162 to pounds (£).	
4 A point P is always exactly 3 m from a sprinkler, L. Describe the locus of the point P.	
5 Write each answer as a single power of 5. (a) $5^9 \times 5^7$ (b) $5^{16} \div 5^7$	

Day 304 **B Tier 10-a-day**

6 The graph shows Ella's journey.
(a) For how many minutes did Ella stop?
(b) Work out Ella's speed in the first 30 minutes. Give your answer in km/h.



7 Ali says, "The value of $n^2 + n + 11$ is a prime number for every positive whole number n."
Show that Ali is wrong.

8 6 gardeners take 8 days to clear a field.
All the gardeners work at the same rate.
How long would it take 3 gardeners?

9 The equation $x^3 + 3x = 17$ has a solution between 2 and 3. (Calculator)
Use trial and improvement to find this solution.
Give your answer correct to 1 decimal place.

10 A cone has base radius 9 cm and vertical height 6 cm.

Volume of a cone = $\frac{1}{3}\pi r^2 h$

Work out the volume of the cone.
Give your answer in terms of π.