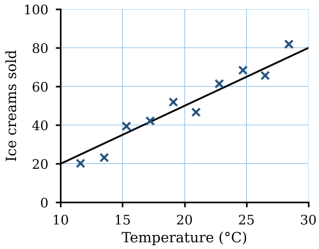
Day 47 **B Tier 10-a-day**

1 The scatter graph shows information about temperature and ice creams sold.
A line of best fit is drawn.
(a) Describe the correlation.
(b) Use the line of best fit to estimate the ice creams sold when temperature is 23.



2 Solve $8n - 8 = 5n - 23$

3 A car travels 12 km on each litre of petrol. (Calculator)
Petrol costs £1.30 per litre.
Work out the cost of the petrol for a journey of 96 km.

4 Work out the value of $4a + 3b$
when $a = -1$ and $b = 4$

5 The table shows the goals scored in each match by a team.
Work out the mean.

Goals	1	2	3	4
Frequency	7	4	1	3

Day 47	B Tier 10-a-day
6 (a) Write $\frac{4}{25}$ as a decimal. (b) Write $\frac{5}{6}$ as a recurring decimal. For part (b), write down the first 8 decimal places and say which digits repeat.	
7 A is the point $(-1, 4)$ and B is the point $(6, -3)$. (Calculator) (a) Work out the coordinates of the midpoint of AB. (b) Work out the length of AB. Give your answer correct to 1 decimal place.	
8 (a) Solve $0 < 2x + 4 < 4$ (b) Write down the integer values of x that satisfy this inequality.	
9 A triangle has sides of length 9 mm, 8 mm and 6 mm. Is the triangle right-angled? You must show your working.	
10 In a sale, the price of a sofa is reduced by 30%. (Calculator) Two weeks later it is reduced by a further 50% of the new price. The final price is £43.75. Work out the original price of the sofa.	