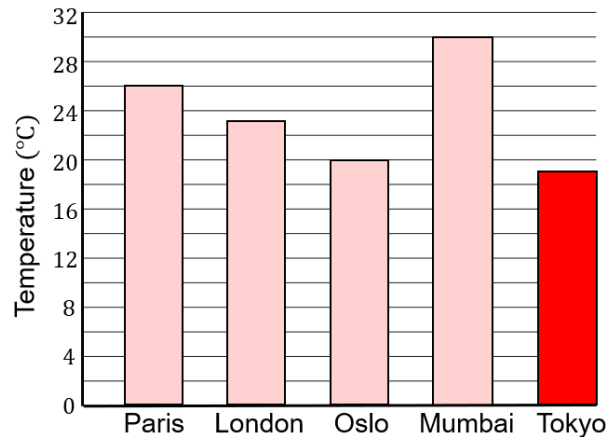


Statistics and Probability Revision

2

(a)

The bar chart shows the maximum July temperature, in $^{\circ}\text{C}$, in each of four cities across the world.



(i) Write down the maximum July temperature for London.

23°C

(ii) The maximum July temperature for Tokyo is 19°C . Draw a bar on the chart to show this information.

(b)

Here is a list of Brooke's last seven scores in her spelling tests.

9 7 4 7 8 5 7

(i) Write down the mode of these scores.

7

(ii) Find the range of Brooke's spelling test scores.

5

(c)

The two-way table shows the favourite science of 90 students surveyed in Year 7 and Year 8. Complete the two-way table.

	Y7	Y8	Total
Physics	17	8	25
Biology	20	22	42
Chemistry	10	13	23
Total	47	43	90

(d)

A fair four-sided dice is thrown twice, and the scores added together.

(i) Complete the table to show all the possible scores.

		First Throw			
		1	2	3	4
Second Throw	1	2	3	4	5
	2	3	4	5	6
	3	4	5	6	7
	4	5	6	7	8

(ii) Find the probability that when the dice is thrown twice the total score is 4.

$\frac{3}{16}$

(ii) Find the probability that when the dice is thrown the total score is an odd number.

$\frac{8}{16}$

(e)

Here are the number of books read by each of eight students across a one year period.

11 5 6 5 12 9 10 10

(i) Find the median number of books read.

9.5

(ii) Calculate the mean number of books read.

8.5

(f)

$\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

$A = \{\text{odd numbers}\}$

$B = \{\text{prime numbers}\}$

(i) List all the members of the set $A \cap B$

$\{3, 5, 7\}$

(ii) List all the members of the set $A \cup B$

$\{1, 2, 3, 5, 7, 9\}$