

Question 1

A class of 30 students counted the number of books in their bags on a certain day. The number of books in EACH bag is shown below.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 4 | 6 | 3 | 2 | 1 | 7 | 4 | 5 | 3 |
| 6 | 5 | 4 | 3 | 7 | 6 | 2 | 5 | 4 | 5 |
| 5 | 7 | 5 | 4 | 3 | 2 | 1 | 6 | 3 | 4 |

(a) Copy and complete the frequency table for the data shown above.

| Number of Books (x) | Tally | Frequency (f) | $f \times x$ |
|-------------------------|-------|-------------------|--------------|
| 1 | | 2 | 2 |
| 2 | | 3 | 6 |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |

(4 marks)

(b) State the modal number of books in the bags of the sample of students. (1 mark)

(c) Using the table in (a) above, or otherwise, calculate

- the TOTAL number of books (2 marks)
- the mean number of books per bag. (2 marks)

(d) Determine the probability that a student chosen at random has LESS THAN 4 books in his/her bag. (2 marks)

Total 11 marks