

1. Draw the box plot and interpret it for data::

7, 15, 4, 10, 6, 11, 25, 1, 16, 3, 10, 8, 10, 6, 13, 3

2. For data:

Interval	Number
0 - 2	2
2 - 4	5
4 - 6	3
6 - 8	4
8 - 10	7
10 - 12	8
12 - 14	5
14 - 16	3
16 - 18	6
18 - 20	2

- Describe the shape of the histogram.
- Compute the mean.
- In what interval is located the median and the mode? Why?

3. A committee of 12 is to be formed from 10 men and 8 women candidates. Compute the probability that

- there must be 6 men and 6 women,
- there must be more women than men.

4. Let  $P(A \cup B) = 0.5$ ,  $P(A) = 0.2$ ,  $P(A'|B) = 0.75$ . Find  $P(B)$ .

5. Let events  $A_1, A_2, A_3, A_4, A_5$  be mutually independent such that  $P(A_j) = \frac{1}{j+1}$  for  $j = 1, \dots, 5$ . Find  $P(A_1 \cup A_2 \cup A_3 \cup A_4 \cup A_5)$ .