Mode/range/shape

6 questions | 11 marks

Equivalent correct methods earn the corresponding marks.

1. Find the mode of 2, 3, 3, 4, 6. [1 mark]

3 occurs twice; all other values occur once.

Answer: 3.

2. Find the range of 11, 8, 15, 10. [2 marks]

Largest 15, smallest 8.

$15 - 8 = 7$.

Answer: 7.

3. Find all modes of 1, 1, 2, 3, 3, 4. [2 marks]

Each occurs twice, the joint greatest frequency.

Answer: 1 and 3.

4. What is the range of 6, 6, 6, 6? [2 marks]

Largest and smallest are both 6.

$6 - 6 = 0$.

Answer: 0.

5. Describe a cluster and an unusual value in 9, 10, 10, 11, 12, 30. [2 marks]

Five observations lie close together from 9 to 12.

There is a gap of 18 between 12 and 30.

Answer: A cluster from 9 to 12 and an unusually high value at 30.

6. Set A is 1, 2, 2, 3, 7. Set B is 1, 5, 5, 6, 7. Both have range 6. Give one difference. [2 marks]

Check the most common values.

Do not assume matching ranges mean matching distributions.

Answer: For example, A has mode 2 while B has mode 5; most B values are higher.