Frequency tables and appropriate displays

6 questions | 12 marks

Equivalent correct methods earn the corresponding marks.

1. Counts are 6, 4, 10, 5. Find total and the third category’s percentage. [2 marks]

Total 25; $10/25 \times 100 = 40\%$.

Answer: 25; 40%.

2. Choose a display for favourite music genre. [2 marks]

The variable is categorical.

Answer: A bar chart.

3. Choose a display for hourly temperature during one day. [2 marks]

Time is ordered and change is meaningful.

Answer: A time-series line graph.

4. Group 3, 7, 10, 14, 19, 20 into intervals [0, 10), [10, 20), [20, 30). [2 marks]

Boundary values enter intervals starting there.

Answer: 2, 3, 1.

5. Why can starting a bar axis at 90 exaggerate differences? [2 marks]

Small numerical differences can appear proportionally huge.

Answer: Bar lengths omit most of the values below 90.

6. There are 18 valid and 2 missing replies. Nine valid replies choose A. Find A’s percentage among valid replies. [2 marks]

$9/18 \times 100 = 50\%$.

Answer: 50%.