

Solutions

2.1 Density=frequency/class width= $30/10=3$.

2.2 The total is 25 across five observations: mean= $25/5=5$.

2.3 The sorted list is 2,4,4,6,9. Its third observation is 4.

2.4 False. The tallest histogram bar need not contain the most observations. A grouped mean is an estimate. Correlation does not prove causation, and extrapolation extends beyond the observed range.

2.5 A Frequency divided by class width, used as histogram height.

3.1 Densities 2 and 1.5, so the higher bar has fewer observations. Areas represent frequency. Only a grouped midpoint estimate, not the exact mean, follows without raw values; state the endpoint convention.