

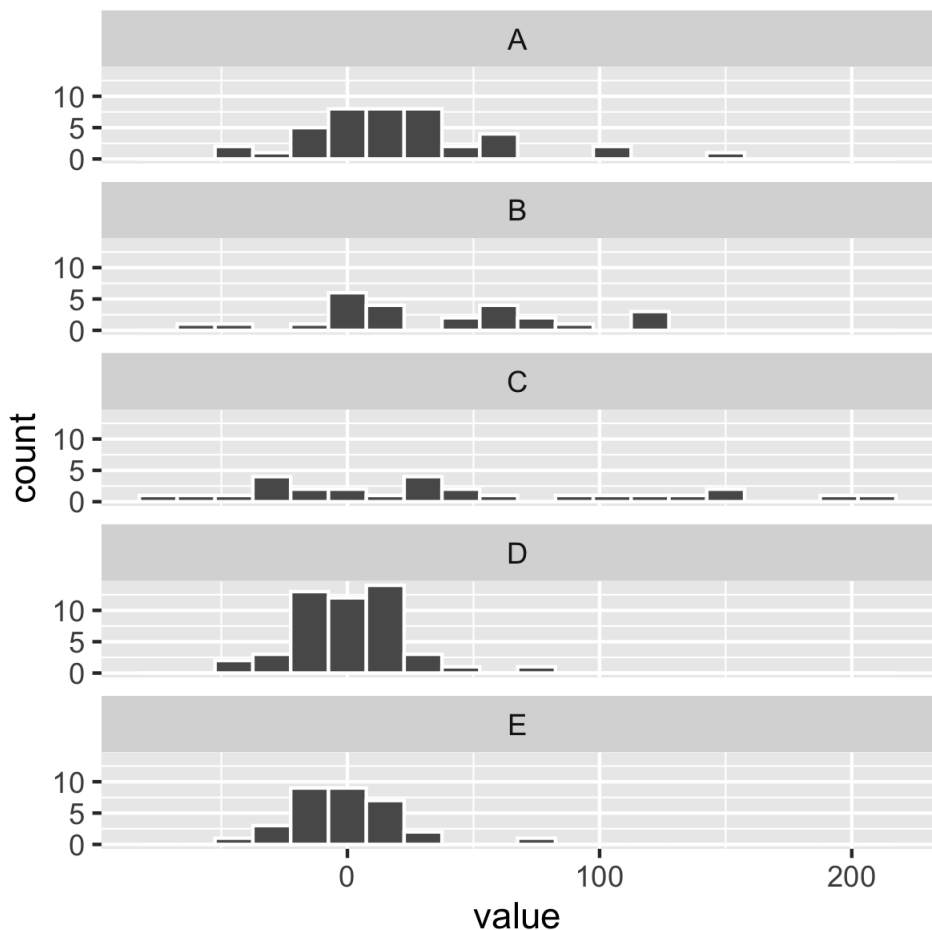
Lesson 3: Describing Quantitative Data: Shape

Preparation

Solutions

Please note that the steps show rounded numbers, but that the final answers to the problems are calculated without rounding.

Problem	Part	Solution
1	Mean	It is the adding up the observed data and dividing by the number of observations in the data set.
1	Median	The median is the middle value in a sorted data set
1	Mode	The most frequently occurring value
2	Company A	Mean: 21.276 Median: 13.433 Mode -48.837209
2	Company B	Mean: 33.482 Median: 20.838 Mode -62.837689
2	Company C	Mean: 41.122 Median: 25.558 Mode -71.050584
2	Company D	Mean: 0.706 Median: 1.892 Mode -44.416873
2	Company E	Mean: -1.084 Median: -3.796 Mode -39.686099

Problem	Part	Solution
 <p>The figure displays five histograms, labeled A through E, each showing a different distribution of data. The x-axis for all histograms is labeled 'value' and has major tick marks at 0, 100, and 200. The y-axis is labeled 'count' and has major tick marks at 0, 5, and 10. Histogram A is centered around 0, with a peak count of approximately 8. Histogram B is centered around 100, with a peak count of approximately 4. Histogram C is centered around 200, with a peak count of approximately 4. Histogram D is centered around 0, with a peak count of approximately 12. Histogram E is centered around 0, with a peak count of approximately 9.</p>		
3	-	
4	-	Answers will vary but should talk about shape, center, and spread of the different graphs and data sets.
5	-	Answers may vary, students should choose a company and justify why. They will probably choose B or C, because they have the highest means.