Data Analysis and Statistical Inference
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In-Video Quiz Questions for
Unit 1: Part 2 – (4) Robust statistics

(01:26)

1. You have collected annual salary data from a large company with many employees who make below $100,000 per year, a fewer number of managers with salaries between $100,000 - $150,000, and a few high-level executives whose salaries can go beyond $1 million per year. Determine what shape the distribution of these salaries would be expected to follow, and accordingly decide whether the mean or the mean would best represent a typical salary for an employee working at this company.

(a) symmetric, mean is a better measure of typical salary
(b) symmetric, median is a better measure of typical salary
(c) right skewed, mean is a better measure of typical salary
(d) right skewed, median is a better measure of typical salary
(e) left skewed, mean is a better measure of typical salary
(f) left skewed, median is a better measure of typical salary

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Answers:

1. d

Explanation: Majority of the distribution is below $100,000 and as the salary increases the number of employees who make as high as salary decreases, hence giving the distribution a long tail on the right (right skewed). For skewed distributions the median is a better measure of the typical observation.