Chapter 2 Location, Variability and Process

Section 2.1 Numerical Summaries Based on Deviations

© 2016 by David W. Gerbing

School of Business Administration Portland State University

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$\frac{\sum (Y_i - m)^2}{n - 1}$$

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$\frac{\sum (Y_i - m)^2}{n - 1}$$

data value

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

 $\frac{\sum (Y_i - m)^2}{n-1}$

data value deviation from mean

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$\frac{\sum (Y_i - m)^2}{n-1}$$

data value deviation from mean squared deviation from mean

sum of squared deviations from mean average of squared deviations from mean based on *df* square root of average of squared deviations based on *df*

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$\frac{\sum (Y_i - m)^2}{n-1}$$

data value deviation from mean squared deviation from mean sum of squared deviations from mean

average of squared deviations from mean based on *df* square root of average of squared deviations based on *df*

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$\frac{\sum (Y_i - m)^2}{n - 1}$$

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$s = \sqrt{\frac{\sum (Y_i - m)^2}{n - 1}}$$

Understanding and computing

► Sample standard deviation: Square root of the average squared deviation score based on degrees of freedom n − 1

$$s = \sqrt{\frac{\sum (Y_i - m)^2}{n - 1}}$$