

Table 3.6 Summary of Five Steps to Computing a Sample's Standard Deviation

<i>Sample Variability</i>			
<i>Step</i>	<i>Verbal Label</i>	<i>Symbolic Equivalent</i>	<i>Equation</i>
1	Deviation score		$(X - M)$
2	Square the deviation scores		$(X - M)^2$
3	Sum of squared deviation scores	SS	Definitional: $SS = \sum (X - M)^2$ Computational: $SS = \sum X^2 - \frac{(\sum X)^2}{N}$
4	Sample variance	SD^2	$SD^2 = \frac{SS}{N - 1}$
5	Sample standard deviation	SD	$SD = \sqrt{\frac{SS}{N - 1}}$