Statistic

Summation Rules and Properties	$\sum_{i=p}^{n} \lambda = (n-p+1)\lambda$	
	$\sum_{i=1}^{n} \lambda x_i = \lambda \sum_{i=1}^{n} x_i$	
	$\sum_{i=1}^{n} (x_i + y_i) = \sum_{i=1}^{n} x_i + \sum_{i=1}^{n} y_i$	
	$\sum_{i=1}^{n} x_i = \sum_{i=1}^{p} x_i + \sum_{i=p+1}^{n} x_i$	
Used Symbols	Statistical sample	$x = (x_1, x_2, x_3, \ldots, x_n)$
	Sample size	N
	Absolute Frequency	n_i
	Relative Frequency	$f_i = \frac{n_i}{N}$
	Cumulative (Absolute) Frequency	N_i
	Cumulative Relative Frequency	F_i
Sample Mean	Ungrouped Data	$\bar{x} = \frac{\sum_{i=1}^{k} x_i}{N}$
	Grouped Data	$\bar{x} = \frac{\sum_{i=1}^{k} n_i x_i}{N}$
		$\bar{x} = \sum_{i=1}^{k} f_i x_i$
Median	If N is odd	$Me = x_k,\ k = \frac{N+1}{2}$
	If N is even	$Me = \frac{x_k + x_{k+1}}{2},\ k = \frac{N}{2}$
Sum of Deviations from the Mean	$\sum_{i=1}^{k} d_i = \sum_{i=1}^{k} (x_i - \bar{x}) = 0$	
Sum of Squared Deviations from the Mean	Ungrouped Data	$SS_x = \sum_{i=1}^{k} (x_i - \bar{x})^2$
		$SS_x = \sum_{i=1}^{k} x_i^2 - k\bar{x}^2$
	Grouped Data	$SS_x = \sum_{i=1}^{k} (x_i - \bar{x})^2 n_i$
Sample Variance	$S_x^2 = \frac{SS_x}{N-1}$	
Sample Standard Deviation	$S_x = \sqrt{\frac{SS_x}{N-1}}$	