

Statistic	Formula	Used For
Sample mean (average)	$\bar{x} = \frac{\sum x}{n}$	Measure of center, affected by outliers
Median	<p>n odd: middle value of ordered data</p> <p>n even: average of the two middle values</p>	Measure of center, not affected by outliers
Sample standard deviation	$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$	Measure of variation; "average" distance from the mean
Correlation coefficient	$r = \frac{1}{n - 1} \sum \frac{(x - \bar{x})(y - \bar{y})}{s_x s_y}$	Strength and direction of linear relationship between X and Y