

### Skewness A

$$\frac{n}{(n-1)(n-2)} \sum_{i=1}^n \frac{(x_i - \bar{x})^3}{s^3},$$

where  $n$  is the sample size,  $\bar{x}$  is the sample mean and  $s$  is the sample standard deviation.

### Skewness B

$$\frac{1}{n} \sum_{i=1}^n \frac{(x_i - \bar{x})^3}{\sigma^3},$$

where  $n$  is the sample size,  $\bar{x}$  is the sample mean and  $\sigma$  is the population standard deviation.

### Kurtosis A

$$\frac{n(n+1)}{(n-1)(n-2)(n-3)} \sum_{i=1}^n \left( \frac{x_i - \bar{x}}{s} \right)^4 - \frac{3(n-1)^2}{(n-2)(n-3)},$$

where  $n$  is the sample size,  $\bar{x}$  is the sample mean and  $s$  is the sample standard deviation.