

Descriptive statistics

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|-------------|--|-------------|--|
| \bar{x} | $\frac{1}{n} \sum_{i=1}^n x_i$ | \bar{x} | $\frac{1}{n} \sum_{i=1}^k n_i x_i$ |
| \bar{x}_H | $\frac{n}{\sum_{i=1}^n \frac{1}{x_i}}$ | \bar{x}_K | $\sqrt{\frac{\sum_{i=1}^n x_i^2}{n}}$ |
| \bar{x}_G | $\sqrt[n]{x_1 \cdot x_2 \cdot \dots \cdot x_n}$ | \hat{x} | x_i for max. n_i |
| \tilde{x} | for n odd: $x_{(\frac{n+1}{2})}$ | \tilde{x} | for n even: $\frac{1}{2}[x_{(\frac{n}{2})} + x_{(\frac{n+2}{2})}]$ |
| x_p | $i_p: np < i_p < np + 1$ | | |
| | for i_p integer: $x_{(i_p)}$ | | for $np, np+1$ integers: $\frac{1}{2}[x_{(np)} + x_{(np+1)}]$ |
| R_Q | $x_{0,75} - x_{0,25}$ | Q | $R_Q : 2$ |
| R_D | $x_{0,90} - x_{0,10}$ | D | $R_D : 8$ |
| R_C | $x_{0,99} - x_{0,01}$ | C | $R_C : 98$ |
| \bar{d}_x | $\frac{1}{n} \sum_{i=1}^n x_i - \bar{x} $ | v | $\frac{s}{\bar{x}}$ |
| s_n^2 | $\frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^2$ | s_n | $\sqrt{s_n^2}$ |
| s^2 | $\frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2$ | s | $\sqrt{s^2}$ |
| a_3 | $\frac{1}{n \cdot s_n^3} \sum_{i=1}^n (x_i - \bar{x})^3$ | a_4 | $\frac{1}{n \cdot s_n^4} \sum_{i=1}^n (x_i - \bar{x})^4 - 3$ |
| a_3 | $\frac{n-2}{\sqrt{n(n-1)}} \cdot a_3^*$ | a_4 | $\frac{(n-2)(n-3)}{n^2-1} \cdot a_4^* - \frac{6}{n+1}$ |
| a_3^* | $\frac{n}{(n-1)(n-2)} \cdot \frac{1}{s^3} \sum_{i=1}^n (x_i - \bar{x})^3$ | | |
| a_4^* | $\left[\frac{n(n+1)}{(n-1)(n-2)(n-3)} \cdot \frac{1}{s^4} \sum_{i=1}^n (x_i - \bar{x})^4 \right] - \frac{3(n-1)^2}{(n-2)(n-3)}$ | | |