Sample Mean: $\bar{x} = x_1 + x_2 + \cdots + x_n = \frac{1}{n} \sum_{i=1}^{n} x_i$

Sample Median: Sort values in increasing order, then:
$$\tilde{x} = \begin{cases} \text{Middle value} & \text{If n is odd} \\ \text{Average of two middle values} & \text{If n is even} \end{cases}$$

Population mean: $\mu = \frac{1}{N} \sum_{i=1}^{N} x_i$

Population median: $\tilde{\mu} = \text{median of} \{x_1, x_2, \ldots, x_n\}$

Sample Variance: $S^2 = \frac{1}{n-1} \sum_{i=1}^{n} (x_i - \bar{x})^2$

Distributions $X \sim \text{Binomial}(n, p)$:

$$\mathbb{E}(X) = n \cdot p | \text{var}(X) = n \cdot p(1-p) | \text{sd}(X) = \sqrt{\text{var}(X)}$$

Random Variables   DRV:

$\mathbb{E}(X) = \sum_x x p(x)$

CRV:

$\mathbb{E}(X) = \int_{-\infty}^{\infty} [x f(x)] \, dx$