This knowledge is applied to the general univariate normal density function

$$p(x) = \frac{1}{\sqrt{2\pi}\sigma}e^{\frac{1}{2}(\frac{x-\mu}{\sigma})^2} \tag{1}$$

- Density is analytically simple

- The univariate case is considered for continuous density

- Most cases are considered Gaussian

- Such a distribution has 95% of its area within 2σ of its mean.