

$$\frac{\Theta\left(\frac{x - \mu - a}{\sigma}\right)}{N(a; \sigma) \sqrt{2\pi\sigma}} \exp\left(-\frac{(x - \mu)^2}{2\sigma^2}\right), N(a; \sigma) = \frac{1}{2} \operatorname{erfc}\left(\frac{a}{\sqrt{2}\sigma}\right)$$