$$e_{i,j} \sim N(0, \sigma^2)$$

$$\mu \sigma -\infty f(x)$$

$$f(x) = \{ 1\sigma\sqrt{2\pi}e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2}, -\infty < x < \infty 0, otherwise \}$$