x_1

 $\frac{1}{(2\pi)^{m/2} \|\mathbf{\Sigma}\|^{1/2}} \exp \left[-\frac{1}{2} (\mathbf{x}_j - \mu_{i})^T \mathbf{\Sigma}_i^{-1} (\mathbf{x}_j - \mu_{i})\right]$

Σ	∝	identity	matrix