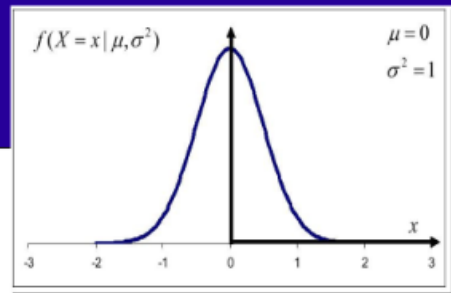


GMM example



- 1-dim, 1-mixture, GMM model:
mean = 100 , variance = 1
- Observed feature **x = 102**, or **x = 99**, then **f(x | 100, 1) =**
- **f (102) = 0.5399**
- **f (99) = 0.2419**

Now: Go to **MyCourses > Lectures > Lecture1 exercise** and open the return box
To get an activity point return your solution today. All attempts will be rewarded.

$$f(X=x | \mu, \sigma^2) = \frac{1}{\sqrt{2\pi}\sigma} \exp\left[-\frac{(x-\mu)^2}{2\sigma^2}\right]$$

Exp (-2) = 0.14
Exp (-1) = 0.37
Exp (-0.5) = 0.61
1/sqrt(2*pi) = 0.40