## **Normal Curve:**

$$y = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}} \qquad \qquad y = \frac{1}{\sqrt{2\pi}\sigma} e^{-\frac{(x-\mu)^2}{2\sigma^2}} -\infty < \mu < \infty , \ \sigma > 0$$

## Graph:



Normal Curve

The normal curve is often called the Gaussian distribution, after Carl Friedrich Gauss, who discovered many of its properties. Gauss, commonly viewed as one of the greatest mathematicians of all time (if not *the* greatest), is properly honored by Germany on their 10 Deutschmark bill:



You will notice the normal curve to his left:

