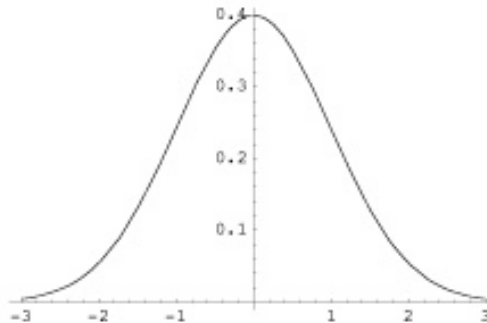


The **standard normal distribution** is the function

$$f(z) = \frac{1}{\sqrt{2\pi}} e^{-\frac{z^2}{2}}$$

Its graph is a bell curve above a region of area 1, with inflection points at $z = -1$ and $z = +1$.



The probability distribution of a continuous rv Z is standard normal if $P(a < Z < b) = \text{area under curve between } z=a \text{ and } z=b$.