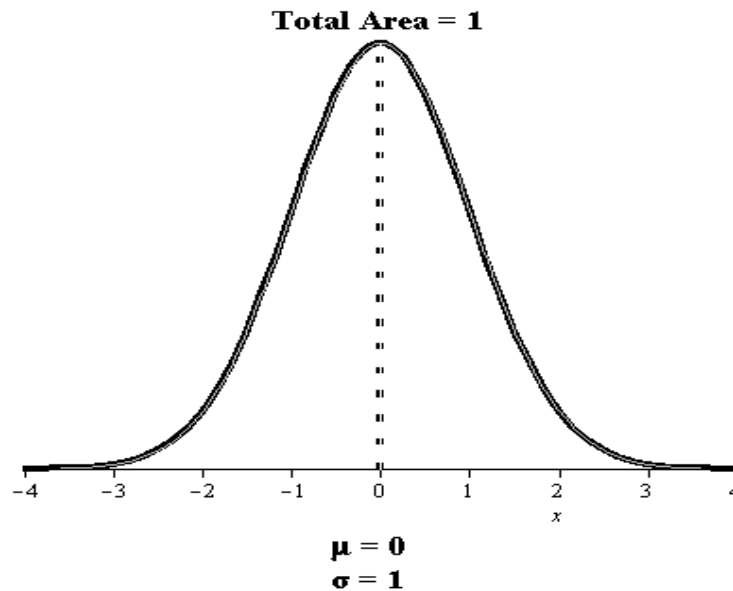


# Standard Normal Distribution



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## Properties:

1. The curve is bell-shaped.
2. Total area under the normal curve is 1.
3. Mean, mode, and median are all equal.
4. It is symmetrical about the mean  $\mu$ .
5.  $\mu = 0$  &  $\sigma = 1$
6. Use  $z$  when working with standard normal distribution.
7.  $z$  is a continuous random variable.
8.  $P(z = a) = 0$

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## Good Practice and habit:

1. Always draw the bell-shaped curve.
2. Always mark and label clearly the bell-shaped curve with  $\mu, \sigma$ , and other important information related to the problem.
3. Always shade the desired area under the normal curve related to the problem.