

means have a mean of 3.49. If the process is continued indefinitely, the mean of the sample means will be 3.5. Also, Table 6-5 shows that the distribution of the sample means is approximately a normal distribution.

### Interpretation

Based on the actual sample results shown in the top portion of Table 6-5, we can describe the sampling distribution of the mean by the histogram at the top of Table 6-5. The actual sampling distribution would be described by a histogram based on all possible samples, not only the 10,000 samples included in the histogram, but the number of trials is large enough to suggest that the true sampling distribution of means is approximately a normal distribution with its characteristic bell shape.

**Table 6-5** Specific Results from 10,000 Trials

