



**FIGURE 10.5**

Central limit theorem. Histograms of the distribution of  $\bar{X}_n$  for different starting distributions of the  $X_j$  (indicated by the rows) and increasing values of  $n$  (indicated by the columns). Each histogram is based on 10,000 simulated values of  $\bar{X}_n$ . Regardless of the starting distribution of the  $X_j$ , the distribution of  $\bar{X}_n$  approaches a Normal distribution as  $n$  grows.