1. Of 300 people waiting lunch at a department store cafeteria, 102 had dessert. What is the confidence associated with a Rao score interval of length .1 (i.e., margin of error .05)?
2. Calculate the sample size necessary to estimate the proportion of drivers that exceed the spend limit on a stretch of a road between Bakersfield and Los Angeles within a margin of error of .04 with a 99% confidence.
3. How large a sample is necessary to estimate a politician’s approval rating with a margin of error of 3.5% if we want 90%, 95%, and 99% confidence?