1. We’ve collected a random same of 8,418 adults from the U.S. population in 2008 and calculated Body Mass Index (BMI). We found the Sample Mean [BMI(hat)] to be 27.7 with an estimated standard error of 0.21.
2. Provide an estimate for the underlying population distribution, showing how you could come to such a conclusion (i.e. explain with a few words or some basic math).
3. Using the distribution described in part a), compute the probability that an individual adult, randomly selected from the U.S. population, will have a BMI greater than or equal to 30 (i.e., calculate Pr(BMI ≥ 30).
4. Construct a 90% Confidence Interval for the mean BMI of the U.S. population (μ).