Suppose that a company CEO claims that more than ¾ of his employees carry a secondary health insurance. You decide to test his claim using a significance level of a = 0.02. A sample of 200 employees finds that 160 of them carry secondary health insurance. First, you set up your hypotheses as follows:

H0: p ≤ 0.75

H1: p > 0.75 (claim)

Then you compute your sample statistic, and get the following:



≈1.63

Compute the probability of getting a sample statistic at least as extreme as z=1.63, and interpret this probability value. Remember that in a one-tailed test such as this, you do not need to multiply your p-value by two.

Choose one of the following:

a. The p-value is small enough to prove the claim

or,

b. The p-value is not small enough to prove the claim