Suppose that an insurance company claims that the average life insurance policy premium that he sells is $450 per year. A sample of 40 customers yields a mean of = $475 and a standard deviation of s = $85. You decide to test his claim at the

a = 0.05 significance level.

If the hypotheses are:

H0: μ = 450

H1: μ ± 450

With critical values of ± 1.96, compute the sample statistic, and choose the appropriate conclusion.

a. we cannot reject H0, thus the average premium may be $450

or,

b. we reject H0, thus the average premium is not $450