

In each case, identify the population parameter about which a claim is made, state the null and alternative hypotheses for a hypothesis test, and indicate whether the hypothesis test will be left-tailed, right-tailed, or two-tailed.

1. The Ohio Department of Health claims that the average stay in Ohio hospitals after childbirth is greater than the national mean of 2.0 days.

Population parameter:

The null hypothesis:

The alternative hypothesis:

Tailed:

2. A wildlife biologist working in the African savanna claims that the actual proportion of female zebras in the region is different from the accepted proportion of 50%.

Population parameter:

The null hypothesis:

The alternative hypothesis:

Tailed:

3. The manufacturer of a new model of hybrid car advertises that the mean fuel consumption is equal to 62 miles per gallon on the highway. A consumer group claims that the mean is less than 62 mpg.

Population parameter:

The null hypothesis:

The alternative hypothesis:

Tailed: