

Homework for YouTube video 4-28-20

From AP Classroom

Past studies indicate that about 60 percent of the trees in a forested region are classified as softwood. A botanist studying the region suspects that the proportion might be greater than 0.60. The botanist obtained a random sample of trees from the region and conducted a test of $H_0 : p = 0.6$ versus $H_a : p > 0.6$. The p -value of the test was 0.015. Which of the following is a correct interpretation of the p -value?

- A** If it is true that 60 percent of the trees in a forested region are classified as softwood, 0.015 is the probability of obtaining a population proportion greater than 0.6.
- B** If it is true that 60 percent of the trees in a forested region are classified as softwood, 0.015 is the probability of obtaining a sample proportion as small as or smaller than the one obtained by the botanist.
- C** If it is true that 60 percent of the trees in a forested region are classified as softwood, 0.015 is the probability of obtaining a sample proportion as large as or larger than the one obtained by the botanist.
- D** If it is not true that 60 percent of the trees in a forested region are classified as softwood, 0.015 is the probability of obtaining a sample proportion as large as or larger than the one obtained by the botanist.
- E** If it is not true that 60 percent of the trees in a forested region are classified as softwood, 0.015 is the probability of obtaining a population proportion greater than 0.6.