

Worksheet 8

1. A cereal company claims that the mean weight of cereal in its packets is more than 14 oz. The weights in ounces of the cereal in a random sample of 8 of its cereal packets are listed below. At the .01 significance level, test the claim. Assume the weights are normally distributed.

14.6 13.8 14.1 13.7 14.0 14.4 13.6 14.2

2. A random sample of 139 forty-year-old men contains 26% smokers. Find the P-value for a test of the claim that the percentage of forty-year-old men that smoke is 22%.

3. Test the claim that the population means are equal based on the following chart and a .05 significance level. Assume the populations are normally distributed.

Treatment Group	Placebo Group
n1=20	n2=10
mean1=235.3	mean2=177.7
s1=5.6	s2=31.4