Name:	Math 130 Day 21 In Class Worksheet
Date:	Section 11.4: Hypothesis Tests for 2 Population Standard Deviations

1. **SAT Test Scores** A researcher wants to know if students who do not plan to apply for financial aid had more variability on the SAT I math test than those who plan to do so. She obtains a random sample of 35 students who do not plan to apply for financial aid and a random sample of 38 students who do plan to apply for financial aid and a random sample of 38 students who do plan to apply for financial aid and a random sample of 38 students who do plan to apply for financial aid and betains the following results.

Do not plan to apply for financial aid: $n_1 = 35$ $s_1 = 123.1$ Plan to apply for financial aid: $n_2 = 38$ $s_2 = 119.4$

Do students who do not plan to apply for financial aid have a higher standard deviation on the SAT I math exam than students who plan to apply for financial aid at the $\alpha = 0.01$ level of significance?