An automobile parts store was interested in comparing the mean life length of three brands of automobile brake shoes. The following data represents the life length, measured in 1,000's of miles, of random samples of six sets of brake shoes of each brand:

Brakes 1	Brakes 2	Brakes 3
43	51	34
44	65	45
57	62	39
41	67	37
47	58	48
54	57	38

a. State the null and alternative hypotheses to test whether there is a significant difference in mean life length among the three brands of brake shoes. Let $\alpha = 0.05$.

b. Compute the ANOVA table

c. Perform the test using the p-value approach.

d. What is the conclusion for the three brands of brakes?