Practice Problems:

Problem 14.3 Suppose you want to compare two treatments, **A** and **B.** In particular, you wish to determine whether the distribution for population **A** is shifted to the right of the distribution for population **B.**

1. Specify the hypothesis you would test.

2. Suppose you obtained the following independent random samples of observations on experimental units subjected to the two treatments:

Sample **A**: 65, 35, 47, 52
Sample **B**: 37, 40, 33, 29, 42, 33, 35, 28, 34

Conduct a test of the hypotheses described in part 1 at $\alpha = 0.05$.

Problem 14.4 Random samples of size $n_1 = 16$ and $n_2 = 12$ were drawn from populations 1 and 2, respectively. The measurements obtained are listed in the following table

Population 1				Population 2		
9.0	15.6	25.6	31.1	10.1	11.1	13.5
21.1	26.9	24.6	20.0	12.0	18.2	10.3
24.8	16.5	26.0	25.1	9.2	7.0	14.2
17.2	30.1	18.7	26.1	15.8	13.6	13.2

1. Conduct a hypothesis test to determine whether the probability distribution for population 2 is shifted to the left of the probability distribution for population 1 at $\alpha = 0.05$.

2. What is the approximated p-value of the test of part 1?