$\hat{\rho}_1$ = ___% $\hat{\rho}_2$ = ___% $\hat{\rho}_3$ = ___% $\hat{\rho}_4$ = ___% $\hat{\rho}_5$ = ___%

n = _____ α = ___%

Population _____

Focus Proportion _____

Step I Identify Procedure:

We want to test the evidence against the claim that the proportions of _____ in the population of _____ is the same for all subcategories (1. _____, 2. _____, 3. _____, 4. _____, 5. _____).

The null and alternative hypotheses are:

H_0: $\rho_1 = \rho_2 = \rho_3 =$ _____ = _____

H_A: One set of proportions are not equal.

Either $\rho_1 \neq \rho_2$ and/or $\rho_1 \neq \rho_3$ and/or $\rho_3 \neq \rho_2$ and/or _____ and/or _____ . . .

Step II Check Conditions:

* _____ _____: A _____ _____ was conducted to insure every member of the population was equally likely to be selected.

* _____: (1) The lack of replacement is not a problem in this case because the number of subjects in the population is more than ____ times the sample size. (2) No expected counts were less than ____, and 80% or more of the expected counts were ____ or more.

Step III Perform Procedure:

df (degrees of freedom) = _____

Expected Counts If $\rho_1 = \rho_2 = \rho_3$ = _____ = _____			Observed Counts:	
1. _____	_____	(_____ X ____%)	1. _____	_____
2. _____	_____	(_____ X ____%)	2. _____	_____
3. _____	_____	(_____ X ____%)	3. _____	_____
4. _____	_____	(_____ X ____%)	4. _____	_____
5. _____	_____	(_____ X ____%)	5. _____	_____
Total	_____		Total	_____

$$\chi^2 = \sum \frac{(Observed\ Count - Expected\ Count)^2}{Expected\ Count} =$$

_____

= _____ + _____ + _____ + _____ + _____

= _____ + _____ + _____ + _____ + _____ = χ^2

$$P - Value = P(\chi^2 > \_\_\_\_ | \rho_1 = \rho_2 = \rho_3 = \_\_\_ = \_\_\_) = \_\_\_\_\_\%$$

Step IV Interpretation:

We reject the null hypothesis at the _____% significance level (____). The P-value of _____% falls (just below OR well below) the significance level, thus there is (moderate OR strong) evidence that the alternative hypothesis is true, _____ _____ (___, ___, ___, ___, ___) are not all equal. The proportion of _____ contributed the largest component of the Chi Square statistic. This relatively large contribution suggests it is the proportion that it is not equal to the other proportions.

OR

We fail to reject the null hypothesis at the _____% significance level (____). The P-value of _____% shows that a set of observed counts as or more different than the expected counts would be expected to occur _____% of the time. Thus, mere chance could explain the differences between the observed and expected counts. We cannot say the proportions of _____ _____ in the population of _____ (___, ___, ___, ___, ___) is not the same for all subcategories (1. _____, 2. _____, 3. _____, 4. _____, 5. _____).