

AP Statistics  
Chapter 12 Part I

12.1 Chi-Square Tests for Goodness of Fit (GOF)

**Stating Hypotheses for Chi-Square Goodness of Fit (FOG) Tests**

**Calculating Expected Counts in a Chi-Square Test for GOF**

**DEFINITION: Chi-square Test statistic**

**DEFINITION: Chi-square Distribution**

**Conditions for Performing a Chi-Square Test for Goodness of Fit**

## **The Chi-Square Test for Goodness of Fit**

## **Follow-up Analysis**

## 11.2 Inference for Two-Way Tables

### **Stating Hypotheses for Tests for Homogeneity**

### **Calculating Expected Counts for a Chi-Square Test Based on Data in a Two-Way Table**

<b>Conditions for Performing a Chi-Square Test for Homogeneity</b>

<b>Chi-Square Test for Homogeneity</b>

### **Follow-up Analysis**

### **Stating Hypotheses for Tests for Independence**

### **Conditions for Performing a Chi-Square Test for Independence**

## **Chi-Square Test for Independence**

## **Using Chi-Square Tests Wisely**

**What if We want to Compare Two Proportions?**