

## Social Science Statistics

# Social Science Statistics

1: Type in the names of your categories.

Please enter category information.

| Categories |  |  |  |  |
|------------|--|--|--|--|
| Alberta    |  |  |  |  |
| Camilla    |  |  |  |  |
| Jimmy      |  |  |  |  |
| Susan      |  |  |  |  |
|            |  |  |  |  |

2: Click "Next."

Please enter category information, above, then press Next.

Next

3: Type in your Observed Frequencies.

4: Type in your Null Expected Frequencies.

Frequencies  Proportions

|         | Observed | Expected |  |  |
|---------|----------|----------|--|--|
| Albert  | 140      | 100      |  |  |
| Camilla | 60       | 100      |  |  |
| Jimmy   | 180      | 100      |  |  |
| Susan   | 20       | 100      |  |  |
|         |          |          |  |  |

Significance Level:

0.01  
 0.05

5: Click "Calculate Chi<sup>2</sup>."

Please select a significance level (it defaults to  $p \leq 0.05$ ), then press Calculate Chi<sup>2</sup>.

Calculate Chi<sup>2</sup>

The Chi<sup>2</sup> value is: 160

|         | Observed | Expected | Difference | Difference Sq. | Diff. Sq. / Exp Fr. |
|---------|----------|----------|------------|----------------|---------------------|
| Albert  | 140      | 100      | 40.00      | 1600.00        | 16.00               |
| Camilla | 60       | 100      | -40.00     | 1600.00        | 16.00               |
| Jimmy   | 180      | 100      | 80.00      | 6400.00        | 64.00               |
| Susan   | 20       | 100      | -80.00     | 6400.00        |                     |
|         |          |          |            |                |                     |

6: This sentence contains your chi-square statistic and p-value.

The Chi<sup>2</sup> value is 160. The  $p$ -value is  $< .00001$ . The result is significant at  $p < .05$ .