Problem 1 – The Test Statistic

1.5: What would a large chi-square value indicate and why?

1.6: What would a small chi-square value indicate and why?

1.7: Would a goodness of fit test be left-, right-, or two-tailed? Why?

Problem 2 – Same Proportion Throughout

Read the claim on page 2.1.

H_0:

H_A:

2.2: Find *E*. _____   2.3: Calculate χ^2. _____

2.4: Find the critical value: _____   2.5: Find the *P*-value. _____

2.6: Is there sufficient evidence to reject the claim that the bus delays occur in equal proportion throughout the week? Explain.

Problem 3 – Different Proportions Throughout

Read the claim on page 3.1.

H_0:

H_A:

3.2: Calculate χ^2. _____   3.3: Find the critical value: _____

3.4: Find the *P*-value. _____

3.5: Is there sufficient evidence to reject the percent of each type of ingredient claimed? Explain.