

## Chapter 3.1-3.3 review

The total counts of three different bird species were recorded for each of three different 2003 Christmas Bird Counts (an annual activity sponsored by the Audubon Society). The table below contains CBC results.

	Ruby-crowned Kinglet	Yellow-rumped Warbler	House Finch
Columbia	78	74	64
Congaree Swamp NM	123	145	161
Santee NWR	351	520	170

1. Find the odds ratio and log odds ratio for comparing kinglets to finches in Columbia and Congaree. Compute the large sample confidence interval for the log odds ratio, then exponentiate the endpoints to derive the large sample CI for the odds ratio. Interpret.
2. Use the SAS code provided on the website to test for independence. Comment on the results for the Pearson and Likelihood Ratio tests. Based on the squared Pearson residuals, which cells show a large deviation from the independence model?