

1. Problems 6.4, 6.5 in your book
2. A study (reported in Julious and Mullee 1994) compared two types of procedures for removing kidney stones: open surgery and percutaneous nephrolithotomy (PN), a “keyhole” surgery that removes the stone through the skin, designed to have much less disturbance than an open operation. In this study
  - For stones less than 2cm, 81 of 87 cases of open surgery were successful compared to 234 of 270 cases of PN.
  - For stones at least 2 cm, 192 of 263 cases of open surgery were successful compared to 55 of 80 cases of PN.
  - (a) Is there evidence of Simpson’s paradox with these data? Include calculations to support your answer. If so, explain to someone not in a statistics class what is giving rise to the paradox in this study.
  - (b) Express the overall proportion of successful operations for the open surgeries as a weighted average of small stone and large stone surgeries.
3. Problem 4.11 in your book. Feel free to think about the data we discussed in class on age, smoking, and mortality.