

HOMEWORK THOUGHTS: A large part of this course is learning how to interpret and communicate results. That is, an isolated p-value will not ever be a complete answer to a question. As stated below, please always explain your answers in a sentence or two (unless, of course, the problem is truly just computational).

1. Section 3.2: 4, 5, 6, 7, 8
2. Section 3.2: Problem 1, page 149
3. In a critical application, exact confidence intervals for the median at the 99.5% level are required. What is the smallest sample size n for which such intervals can be determined?
4. Using R (`pbinom`, `qbinom`), construct the following exact CI for the median:
 - (a) A 95% CI when $n = 15$.
 - (b) A 99% CI when $n = 53$.

In (a) and (b) your intervals are actually for slightly larger percentages of confidence. What *are* those percentages?