

IEOR 3600: HMWK 2

From the Textbook

Pages 35–41: 50,51,52,59,60,66,67,74

Page 71: 14–18

Not from the Textbook

Consider a candidate for USA President, who polls show would win only 1% of the popular vote. Suppose you go out and randomly select 100 registered voters and record the number who will vote for this candidate. Denote this number by N . Assume that N has a binomial distribution with parameters $n = 100$ and $p = 0.01$. Use the Poisson approximation to the binomial distribution to compute the probability that N is at least 2. (Hint: $P(N \geq 2) = 1 - P(N = 0) - P(N = 1)$.)