Stat 230

May 14 Demo/ Practice problems

All the problems are ungraded.

Pr. 1 Pitman 1.3.4

Pr. 2 Pitman 1.3.5

Pr. 3 Pitman 1.3.8

Pr. 4 Pitman 1.3.10

Pr. 5 Pitman 1.3.14

Pr. 6 Let E be an experiment that consists of tossing a coin until a heads is obtained. Denote by X the number of tails obtained before the experiment terminates.

    a) What is $\Pr(X = 0)$?

    b) What is $\Pr(X = 1)$?

    c) What is $\Pr(X = k)$, for $k = 0, 1, \ldots$?

    d) How many times do you need to toss a coin to have probability 0.95 to see at least one heads?

    e) How many times do you need to roll a die to have probability 0.95 to see it land on 6 at least once?