

STAT 575

Practice Problems for Exam 2 (not to be turned in)

1 Problem

The numbers refers to *Cunningham et.al*, if not specified otherwise. Some problems may have additional parts.

1. Suppose the transition probability matrix for an absorbing Markov Chain is:

$$P = \begin{bmatrix} 0.7 & 0.2 & 0.1 \\ 0.3 & 0.4 & 0.3 \\ 0 & 0 & 1 \end{bmatrix}$$

Find $(I - S)^{-1}$ for this transition matrix and interpret the entry q_{21} .