

R-Assignment 3

Math 362, Spring 2011

1. A six sided die is rolled repeatedly. Let X be the random variable for the number of times you have to roll the die before a six is observed.
 - (A) Determine the probability function of X .
 - (B) Determine the cumulative distribution function of X .
 - (C) Use R, to calculate the probability function and the cumulative distribution function for X in a sequence of 20 tosses.
 - (D) Use R to find the number of times the die needs to be rolled in order for the probability of observing a six at least once is 0.95 or greater?