Filip Ramazan STAT 461

Homework #4

Problem 1: Dies by Calculation

Suppose a fair die is tossed three times.

a. Let X be the largest of the faces that appear. Write with justification the probability density function of X.

b. Let Y be the number of different faces that appear. Write with justification the probability density function and the cumulative distribution function F_Y of Y. Plot the graph of F_Y .

Solution. bambam