

Quiz 4

November 22, 2019

Name:

Suppose that 2 balls are selected without replacement from an urn containing 4 red balls and 5 green balls. Let X_i equals 1 if the i -th ball selected is red, and equals 2 if the selected ball is green.

- Compute the joint probability mass function $f_{X_1, X_2}(x_1, x_2)$. (You should present the probability of each distinct pair (x_1, x_2) in a table)
- Are X_1 and X_2 independent? If not, calculate the covariance $\text{Cov}(X_1, X_2)$.