

MATH 113: DISCRETE STRUCTURES
READING QUESTIONS FOR FRIDAY WEEK 9

Reading assignment. Supplement to the fourth probability lecture.

Problem 1. Find random variables X and Y such that $E(X \cdot Y) \neq E(X)E(Y)$, thus proving that expected value is not (in general) multiplicative.

Problem 2. Let X be the difference between the values of the first and second roll of a fair six-sided die. What is the expected value of X ?