

MATH 113: DISCRETE STRUCTURES
"READING" QUESTIONS FOR MONDAY WEEK 9

"Reading" assignment. Watch the third probability lecture video on Youtube.

Problem 1. An opaque bag contains two blue marbles and three red marbles. We randomly take the marbles out of the bag one at a time. What is the probability that the second marble is blue? What is the probability that the second marble is blue given that the first marble is red? What is the probability that the second marble is blue given that the first marble is blue? Use your calculations to verify that Bayes' Theorem holds in this case.