

MATH 113: DISCRETE STRUCTURES
“READING” QUESTIONS FOR WEDNESDAY WEEK 9

“Reading” assignment. Watch the fourth probability lecture video on Youtube.

Problem 1. Consider a situation where you roll a 20-sided die (labeled 1 through 20) and a 6-sided die (labeled 1 through 6). Define a random variable which measures the sum of your two rolls. What is $P(X = 26)$?

Problem 2. You select \$100 of regularly priced merchandise at a store. As part of a promotion, you flip a fair coin at the register. If the coin flip is heads, you pay full price; if it is tails, you get 40% off. What is the expected value of your payment?