

Math 123-02  
Spring 2026  
Dr. Lily Yen

# Quiz Five

Show all your work

Name: \_\_\_\_\_  
Number: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Score: \_\_\_\_/10

**Problem 1:** Answer each question to two decimal place accuracy when appropriate. If an exact answer is possible expressed as a fraction, you may leave your answer as a fraction.

a. Suppose the probability of rain tomorrow is 80%. What would be the probability of no rain tomorrow?

b. Dad constructed a spinner with five equal sectors, each labelled with a different snack: Aero, HiChew, Mars Bar, Chips, Twix. Assume that the pointer never lies on a border, what is the probability that Samlette does not get Chips after two spins?

c. When Katharina rolls two cubic dice (D6), what is the probability of getting a total of less than 6?

Score: \_\_\_\_/3

**Problem 2:** Hamlet and Samlette found three fair coins to flip. answer the following questions.

a. Draw a probability tree for flipping three coins.

b. Find the probability of getting at least one Heads from flipping three coins.

Score: \_\_\_\_/3

**Problem 3:** Assume that 13% of international visitors arriving at the Vancouver International Airport are sick with the latest variant of Covid. Suppose a Covid test correctly identifies a visitor sick with Covid 91% of the time. Also assume that the test falsely identifies a healthy visitor as sick with Covid 6% of the time. If an international visitor tests negative, what is the probability that the visitor is actually sick with Covid?

Draw a probability tree as part of your steps.

Score: \_\_\_\_/4