

Quiz Five
Show all your work

Name: _____
Number: _____
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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. How many outcomes are in the sample space for rolling three cubic dice?

- b. When you flip a fair coin twice, what is the probability of not getting any tail?

- c. The chance of a sunny day tomorrow is 15%. What is the chance of not getting a sunny day tomorrow?

Score: ____/3

Problem 2: During the Remembrance Day long weekend, Dad constructed a spinner with five equal sectors, each labelled with a different dollar amount: \$1, \$2, \$5, \$10, \$20, for Hamlet and Samlette. Assume that the pointer never lies on a border, answer the following questions. Get partial marks by constructing the sample space as a table or drawing a probability tree in each case.

- a. Find the probability of getting more than \$3 after one spin.

- b. Find the probability of getting less than \$10 after two spins.

Score: ____/3

Problem 3: Assume that 5% 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 90% of the time. Also assume that the test falsely identifies a healthy visitor as sick with Covid 8% of the time. If an international visitor tests positive, what is the probability that the visitor is actually not sick with Covid?

Draw a probability tree as part of your steps.

Score: ____/4