

Quiz 2 – OMGT6123

Read all instructions carefully and answer each question asked. Calculations are important but so are explanations and dialogue. **FULLY EXPLAIN ALL ANSWERS IN ORDER TO RECEIVE CREDIT.**

1. You are required to submit this quiz by the due date via Canvas. **MAKE SURE TO USE THE NAMING CONVENTION SET DOWN IN THE SYLLABUS WHEN SUBMITTING YOUR QUIZ/FILES IN CANVAS.** Late papers will not be accepted.
2. Your work should consist of:
 - a. A cover sheet with your name and the date.
 - b. A **1-PAGE**, one-side only, Executive Summary of your work including explanations, calculations, diagrams, etc. Please feel free to include as much detail as you think necessary but remember you have limited space.
 - c. Executive summaries are expected to be typewritten (i.e., MS-Word, WordPerfect). However, calculations can be handwritten. Clarity and neatness are expected.
 - d. Please refer to the **website for further information regarding writing executive summaries.** You may use any font and spacing that is reasonable. i.e., 0.25-inch margins and font size 10 are at the low end of reasonable. At a minimum your summary must have section headers & structure (e.g., Introduction, Analysis, Recommendations). Remember you are presenting this to your boss.
 - e. Please attach all calculations, spreadsheets, diagrams, graphs, etc., in a separate section(s) and label it/them Appendix A. If you are running short on space in your executive summary, you may reference pages in the Appendix. (This may come in handy for certain diagrams, graphs, etc.) It is vitally important that you link your work to the executive summary, i.e., **I will NOT go searching for answers, spell them out in your executive summary and show your work in the Appendix!!**
3. You will be graded on both your calculations and your presentation. Calculations will be weighted approximately 75% and your presentation (i.e., the executive summary) will be weighted 25%. Just a reminder, if I can't read it or find it, I can't grade it.

A typical quiz will have the following parts:

- a cover page with your name and date,
- your executive summary,
- an appendix cover page, and
- your appendix pages as separate sections/files.

You may turn in both a Word file and an Excel file (the Excel file would most likely contain your Appendix material).

NOTE: I WANT ONLY 1 (ONE) EXECUTIVE SUMMARY THAT INCLUDES ALL QUIZ PROBLEMS. DO NOT CREATE MORE THAN 1 (ONE) EXECUTIVE SUMMARY!! PLEASE EMAIL ME IF THIS IS NOT CLEAR.

Quiz 2 – OMGT6123

Read all instructions carefully and answer each question asked. Calculations are important but so are explanations and dialogue. **FULLY EXPLAIN ALL ANSWERS IN ORDER TO RECEIVE CREDIT.**

Introduction

Sammy works for a large insurance processing company in their corporate office. She has been presented with the following areas. Please help Sammy out with her analysis and recommendations.

Sammy's Investment Impasse

The probabilities of insurance payouts are as follows:

Payout	p(payout)
\$100,000	0.01
\$50,000	0.10
\$10,000	0.15
\$1000	0.25
\$100	0.49

What is the expected payout & standard deviation for the insurance payouts?

Sammy believes a new training program can reduce all payouts by 50% on average (e.g., the \$100,000 payout would drop to \$50,000). The probabilities of the payouts will stay the same.

What is the new expected value & new standard deviation for the insurance payouts?

How do the original expected payout & standard deviation compare to the new expected payout & standard deviation under the training program?

Boss' Beachwear Bewilderment

In a last-minute attempt to prepare for the company's beach party Sammy's boss gives her the following information and asks her advice. At the company party 75% of the people attending are wearing Aloha Hawaiian shirts. From past data the following is true; given that someone is wearing an Aloha shirt, the probability that the person is an executive is 5%. However, given those not wearing Aloha shirts, 80% are not executives. Sammy's boss is trying to be part of the executive crowd but also wants to wear an Aloha shirt. He has asked the following questions:

Create a probability tree & joint probability table for this problem.

What percentage of people attending the party are actually executives?

Given that a person is an executive, what is the probability that they will be wearing an Aloha shirt?

What percentage of partygoers are wearing Aloha shirts and are executives?

Given a person is not an executive, what is the probability that they will be wearing an Aloha shirt?