Introduction to Quantitative Risk Analysis

Assignment 1

Q1:

Would probably do some sort of Cost/Benefit analysis, projecting possible profit/loss for some time in the future, possibly perpetuity. Would use at least 3 point estimating techniques for example, good scenario, average, worst case.

This CBA would attempt to identify risks, and quantify likelihood and impact (cost). You can then multiply likelihood by cost to arrive as some quantifiable number for the cost side of the CBA.

Q2:

A continuous distribution is one where the observations can take on any REAL number, for the time it takes for a sprinter to run the 100m dash.

A discrete distribution is one where the observations take on one of usually a limited number of pre-known observations. These are usually from the Integer numbers. For example, you roll a pair dice 100 times. The results will be in the set of real integers [1-12].

Q3:

R’s win = .3

D’s win .7

R) Business successful = .3 \* .8 = .24

D) .7 \* .45 = .315

(.315+.24)/2 = .2775

Business Success = 27.75%

Q4:

Loss = 1000\*(1-.2775) = 722.5$

ProfitA = .8\*2000\*.2775 = 444$

ProfitB = .2\*5000\*.2775 = 277.5

A+B/2 = 360.75$

Net = 360.75-722.5 = (-361.75$) = Screwed.