Colorado Springs Simulation Lab

You are a manager for Jones Bros. Trucking located in
Penrose, Colorado and have won a contract to truck bulk
cement from Holcim in Penrose, Co to a large cement (redi-
mix) plant in Monument, CO just north of Colorado Springs
(COS).

Your boss has directed you analyze the trucking time for loaded trucks
from Penrose to the Monument redi-mix plant. You know the following
information: The trip consists of 2 Parts:

Part 1 - driving from Penrose to COS is **triangularly (symmetrically)
distributed** from 50 to 82 minutes.

Part 2 -driving through COS to Monument is **normally distributed** with
a mean of 55 minutes and an SD of 15.5 minutes.

You decide the best way to analyze this data is to SIMULATE the entire
driving time from Penrose to Monument using MS Excel and your
knowledge of simulation.

Provide your boss the following information in a **quality word processed
document** with ALL necessary supporting documentation:

The histogram of the one-way driving times from Penrose to Monument
(use bins of 5 minutes).
The PDF (probability density function [equation] associated with the
histogram determined in (1) above. This will require regression analysis.
The descriptive statistics of these one-way simulated trips
The one-way trip probabilities for the following:
      - a trip will take less than 90 minutes
      - a trip will take between 80 and 115 minutes
      - a trip will take more than 115 minutes

 Submit your report as an e-mail attachment to: mheinen_1@msn.com

 This report is due NLT: Monday May 15, 2017