

IE 460 Comments on Homework #3

The homework questions this time are straightforward. You must respond to each question asked in the problem statement. More specifically, you need to be able to write and compute for normally distributed demand:

- the optimal order quantity (table look-ups or use Excel),
- the expected profit from the policy used (policy results in the computation of the order quantity),
- the expected number of customers not satisfied (turned away) because of stocking out,
- the expected stock remaining in the inventory at the end of the season (this was not asked).

Note that Question 2 is the same question with “improved” forecasts. Hence, if you have used (coded the correct formulas for) Excel to compute your quantities, life would be straightforward in Question 2.

There is an effort spent to develop the “improved” forecasts. Think about the maximum expenditure you would economically defend for such a study (of course, after the study ended).

An important detail in using Excel or a similar spreadsheet program: As you submit your work as a hard copy, the formulas you have established in Excel (or any program) may only be visible if you force it and make it visible. We need to see the formulas to follow your work.

Final note: I recommend you thoroughly review the derivations while doing your homework. By doing so, you can understand the solution technique and solve more complicated problems (for instance, how do you find optimal order quantity if there is a price discount?)

Homework 3 statistics:

Average: TBA Standard Deviation: TBA

Grade	3	2	1	0
# of students				

Question 1

Comments regarding your performance and grading:

- Notice the half grades now!!)

Question 1 statistics:

Average: TBA Standard Deviation: TBA

Grade	2	1.5	1	0.5	0
# of students					

Question 2

Comments regarding your performance and grading:

- Notice the half grades now!!)

Question 2 statistics:

Average: TBA Standard Deviation: TBA

Grade	2	1.5	1	0.5	0
# of students					