Operations Strategy – Exam January 2014

1) You need to buy square feet at 4,8 dollar in long term contracts, or at 6 dollar at the spot market, your demand is normally distributed with mean = 35 000 and std = 7500. What is the optimal amount of space to buy with long term contracts? And what would change if the std dev went up? (3 ptn)
2) High demand = 75000, low demand = 50000, margin = 80, C(K) = 2 MIO + 10K, no penalty costs, discount rate = 10%. Calculate the option value of waiting. What would happen if Cp increased? (4 ptn)
3) Incumbent firm & new entrant, incumbent firm has WTP1 = 400-5x, entrant has WTP2 = 320-4x. c1= 200, c2=140. What would be the optimal price setting? And what is the increase in marketsize compared to the incumbent firm only? (4 ptn)

Multiple choice (9 in total, op 9 ptn met giscorrectie van -0,5 per fout)

- badge enginieering (uit die paper)
- demand pooling, what risk is reduced? (inventory risk, receivables risk,…) (uit een paper)
- Omega1, Omega2, Teta1, Teta2 are given, welke uitspraak is waar?
- Operational hedges, wat doen ze (NPV verhogen en variance reduceren, of risico aversie verminderen, of alle twee)?
- Koss model, wat doet het? (Beschermen tegen seasonal volatility, tegen seasonal volatility en variance van demand binnen de seizoenen, of geen van de 2)
- De andere 4 ben ik vergeten…