Exercises for chapter: Page breaking

1. Find a place in the NP-completeness proof of MQ that uses the quadratic badness function, and show that the underlying fact does not hold for linear functions. Does it hold for other functions than quadratic?
2. Explain how the linearity of the badness function is essential for the dynamic programming solution of ML.
3. The discussion of the ML problem only gave the cost computation. How can the actual page assignment be derived from the given construction? What is the time and space complexity of this part of the algorithm?