

CS 561, HW4

Prof. Jared Saia, University of New Mexico

Due: November 7th

1. Find the optimal parenthesization for a matrix-chain product whose sequence of dimensions is: $(2, 3, 2, 2, 1)$. (Don't forget to include the table used to compute your result)
2. Exercise 15.3-5
3. Exercise 15.2-5 (hint: use proof by induction)
4. Exercise 15.4-1
5. Exercise 15.4-5 (note: monotonically increasing means strictly increasing, e.g. 1, 2, 4, 5, 7)
6. Problem 15-4
7. Exercise 16.1-1
8. Exercise 16.1-4
9. Exercise 16.2-4
10. Exercise 16.2-5