Today Preliminaries; example of problem decomposition & dynamic programming.
Next class Fundamentals of algorithm analysis; dynamic programming. §§[1] 2.∗, 3.∗, 15.{0,1}.
Reminders Newsgroup. Reading. Coding. Practice. Don't fall behind.

1. List the members of your group below. Underline your name.

2. For the following mapping of rod lengths to prices, trace the execution of a recursive cut-rod algorithm for a rod of length 12.

length	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
price	3	4	9	11	14	17	19	24	28	29	32	36	37	41	44

[1] Throughout this course, section numbers such as these will, by default, refer to the textbook: Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein. *Introduction to Algorithms*. MIT Press, 3rd edition, 2009.

3. Repeat Question 2 for the memoized cut-rod algorithm (top-down).

4. Repeat Question 2 for the bottom-up cut-rod algorithm.

5. (informal homework) Implement all three versions of the cut-rod algorithm and conduct a brief experimental study of their performance. Discuss your results on the class newsgroup.