stress latter part : np complete, intractability.

half of the exam: short number questions: concepts, TF

other half: do reductions: will be short, straightforward fill in the blank--should be easy don't go too far

- RAM machine model revisit and understand how this is a reasonable model for the polynomial time expression

robust wrt polynomial time.

Divide & Conquer

- go over, might have something similar on exam: max subsequence sum,

Dynamic Programming

- 4 step approach 1. need to make a choice. 2. assume optimal choice is known 3. identify resulting subproblems 4. prove optimal substructure

typically done using a "cut-and-paste" approach. wanna solve big problem. assume solution is blah, take out part of substructure that are not

optimal, paste in the optimal one, acheive better results.

Intractablity:

- Decision Problems: Formal Languages--subset of strings.

- P ~ Decision algorithms

- NP ~ Verification Algorithms that run in polynomial time. given an instance, existence of witness/certificate makes verification in polynomial time.