

Name: _____

Exercise A1, 1/21/05

Part 1: Using a Theory

This is a course about Theory behind many computing concepts. However, the notion of “theory” is not necessarily well understood or appreciated. Before we can discuss components of the Theory of Computation, we had better confirm our understanding of theory in general.

Task 1: Identify multiple examples of theory (*both in and outside* computer science). Then, discuss how they can be used in practical situations, and comment on their usefulness.

Task 2: Give your own definition of “theory.” Do not look up any reference. Be flexible and creative.

Task 3: Describe your personal feelings about theory. Were you always comfortable and content? Were there any time you felt that some theory is too abstract and/or useless?

Be prepared to discuss this part in class.

Part 2: Review “Problems”

A lot of our activities (computational or not) begin with a problem. Thus, a good grasp of problems at different levels for appropriate processing is an important skill.

Task: Concisely write up your response to Unit A1 Group Exercise 3 (in class; slides available on-line). That is, re-do the exercise for your own problem from Exercise 00. Certain problems may not be neatly analyzed in the way discussed in class. If your problem falls in that category, explain why.

Note: If you think you understood how to do this part, you should place a check mark for the criteria in Content Goal 1 (eval form). Then, you can fill in your supporting notes with a brief description of how you were able to achieve those criteria. If you have questions, contact the instructor right away.

Instructions/Notes (for both parts):

- 1. Follow the general guidelines given in Exercise 00.
- 2. Clearly identify parts and tasks.
- 3. Review the evaluation form and start to write your supporting notes.

Survey: Time spent between classes: _____

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