

Homework III

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Due Mar. 27, 2002

Do the following:

1. 4.48. Illustrate the delay model you use for the one-bit full adder, the four-bit carry lookahead adder, and the carry lookahead unit. Make sure you show your work so that I can determine how you arrive at your delay figures.
2. 4.52. Assume that the “traditional adder” used to add the final two large numbers is a carry lookahead adder. Again, show work.
3. 4.53. Also answer this question: When i is zero, what value should be used for a_{i-1} ? You may not use the example from class or anything similar to it.
4. 5.5.
5. 5.9.