

CIS 786 Homework 2 (Due: **Oct 28, 2004**)

Problem 1. (60 points)

Do as instructed in

<http://www.cs.njit.edu/~alexg/courses/cis786/handouts/phw3.ps>

<http://www.cs.njit.edu/~alexg/courses/cis786/handouts/phw3.pdf>

Problem 2. (20 points)

On the Web I uploaded an updated version of Subject 2 related notes. You can distinguish it from the previous version by its length and the "revised on Sep 30, 2004" note on the first page. Go to page 32 and complete the proof of Problem 3 there, i.e. the lower bound for finding the max in two rounds using $\Omega(n^{4/3})$ processors.

Problem 3. (20 points)

Continuing Problem 2 above, stay on page 32 of Subject 2, and complete the proof of Problem 4. In the notes only a "Long Hint" is given. Turn it into a detailed proof.