Purpose
This lab reviews combinational logic design

Assignment
Part I
Design and build a 2-bit by 2-bit multiplier circuit using a breadboard and IC chips. Test the circuit for all different input combinations. Tabulate your results and provide a short discussion of one or two of the results.

Part II
Extend the 2-bit by 2-bit multiplier design to realize a 4-bit by 3-bit multiplier. You do not have to build that circuit; only show the schematics on paper. Label all inputs and outputs.

Lab Report
- Lab reports should be neatly typed and well organized.
- No hand-written documentation or hand-drawn schematics or diagrams will be accepted.
- Upon completion of the lab, your lab report should include:
  1. A cover page with your Name, Lab number and title, CPEN315, Spring 2008, and Date, all in order and in the center of the cover page. (5 points)
  2. Schematic diagram of the 2x2 bit multiplier circuit and a brief description of its operation. (20 points)
  3. Results and discussion. (10 points)
  4. Schematic diagram of the 4x3 bit multiplier circuit. (10 points)
  5. Cited work for reference(s) that you used for this lab. (5 points)

In addition to submitting the lab report, you need to demonstrate to me the performance of your 2x2 bit multiplier circuit on the due date. Late labs (report/demos) will be deducted 50%, even if one day late.

Grading
Multiplier Demo = 50%
Lab Report = 50%