University of California at Berkeley
College of Engineering
Department of Electrical Engineering and Computer Science

EECS150, Spring 2010

Homework Assignment 1: Combinational Logic and MIPS Review
Due January 28, 2pm

Homework submissions will be electronic, details to follow. Please format your homework as plain text with either PNG or PDF for any necessary figures. Microsoft Visio is installed on the machines in 125 Cory, and is a useful tool for drawing figures of all kinds.

1. Consider the wide range of computer systems in current production, from high-performance supercomputers to small embedded controllers (such as in your car engine). Sketch a curve showing what you think would be the performance of all these systems as a function of their cost. Using arbitrary units, put *performance* on the y-axis and *cost* on the x-axis.

2. DDCA problem 1.2

3. DDCA problem 1.4

4. DDCA problem 1.49

5. DDCA problem 1.50

6. DDCA problem 1.51

7. DDCA problem 1.52

8. DDCA problem 1.53

9. DDCA problem 1.54

10. DDCA problem 1.55

11. DDCA problem 1.58

12. DDCA problem 1.59

13. DDCA problem 6.2

14. DDCA problem 6.8

15. DDCA problem 6.9