

Name _____

CM _____

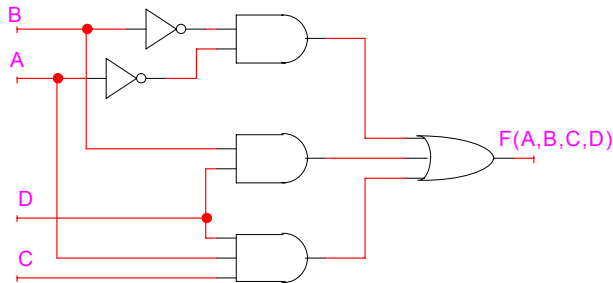
Due date: Tuesday, 7 Oct.

ECE130-03

Homework #13
(glitch and hazard)

Fall 2003

- 1 Determine from the following schematic the number of hazards and list below all pairs of cells between which a hazard exists, for example, (cell 1, cell 3). Label the cells on your own. Write a hazard-free expression to implement the same function. Use K-map to help you explain your solution.



	00	01	11	10
00				
01				
11				
10				

- 2 What hazard and how many of them in terms of a pair of cells are there in the following implementation on the K-map? How do you propose to remove them?

		AB			
		00	01	11	10
CD	00	0 1	4 0	12 0	8 0
	01	1 1	5 0	13 1	9 0
	11	3 1	7 1	15 1	11 1
	10	2 0	6 0	14 1	10 0