

Homework 12 Solution

Problem 1

Cache	m	C	B	E	S	t	s	b
1	32	1024	4	4	64	24	6	2
2	32	1024	4	256	1	29	1	2
3	32	1024	8	1	128	22	7	3
4	32	1024	8	128	1	28	1	3
5	32	1024	32	1	32	22	5	5
6	32	1024	32	4	8	24	3	5

Problem 2

Cache	m	C	B	E	S	t	s	b
1	32	2048	8	1	256	21	8	3
2	32	2048	4	4	128	23	7	2
3	32	1024	2	8	64	25	6	1
4	32	1024	32	2	16	23	4	5

Problem 3

A.

11	10	9	8	7	6	5	4	3	2	1	0
CT								CI		CO	

B.

Operation	Address	Hit (Y or N)	Read value (or unknown)
Read	0x834	N	unknown
Write	0x836	Y	--
Read	0xFFD	Y	0xC0