

2. FIFO Policy

first-in, first-out

Access	Hit/Miss?	Evict	Resulting Cache State	
0	Miss		First-in→	0
1	Miss		First-in→	0, 1
2	Miss		First-in→	0, 1, 2
0	Hit		First-in→	0, 1, 2
1	Hit		First-in→	0, 1, 2
3	Miss	0	First-in→	1, 2, 3
0	Miss	1	First-in→	2, 3, 0
3	Hit		First-in→	2, 3, 0
1	Miss	2	First-in→	3, 0, 1
2	Miss	3	First-in→	0, 1, 2
1	Hit		First-in→	0, 1, 2

Figure 22.2: Tracing The FIFO Policy

4 hits, 7 misses, hit rate = $4/(4+7) = 36.4\%$

Excluding compulsory misses: 4 hits, 3 miss, hit rate = $4/(4+3) = 57.1\%$