R 0x523517 W 0x337128 R 0x721513 W 0x331818 W 0x225935 R 0x337192 W 0x337191 R 0x225933

Cache Size is 64B, block size is 16B, and it is a 2-way associative. Find the number of misses, memory read and memory writes:

## A) Write-back

	MRU	LRU
Set 0	Invalid	Invalid
Set 1	Invalid	Invalid

1-

R 0x523517

Tag = 0x52351 Set= 0x1

	MRU	LRU
Set 0	Invalid	Invalid
Set 1	0x52351	Invalid

Total Misses: 1 Total Hits: 0

Total Memory Reads: 1 Total Memory Writes: 0

2-

W 0x337128

Tag = 0x33712 Set= 0x0

	MKU	LKU
Set 0	0x33712 (D)	Invalid
Set 1	0x52351	Invalid

Total Misses: 2 Total Hits: 0

Total Memory Reads: 2 Total Memory Writes: 0 3-

R 0x721513

Tag = 0x72151 Set= 0x1

 MRU
 LRU

 Set 0
 0x33712 (D)
 Invalid

 Set 1
 0x72151
 0x52351

Total Misses: 3 Total Hits: 0

Total Memory Reads: 3 Total Memory Writes: 0

4-

W 0x331818

Tag = 0x33181 Set= 0x1

 MRU
 LRU

 Set 0
 0x33712 (D)
 Invalid

 Set 1
 0x33181 (D)
 0x72151

Total Misses: 4 Total Hits: 0

Total Memory Reads: 4 Total Memory Writes: 0

5-

W 0x225935

Tag = 0x22593 Set= 0x1

 MRU
 LRU

 Set 0
 0x33712 (D)
 Invalid

 Set 1
 0x22593 (D)
 0x33181 (D)

Total Misses: 5 Total Hits: 0

Total Memory Reads: 5 Total Memory Writes: 0

6-

R 0x337192

Tag = 0x33719 Set = 0x1

 MRU
 LRU

 Set 0
 0x33712 (D)
 Invalid

 Set 1
 0x33719
 0x22593 (D)

Total Misses: 6 Total Hits: 0

Total Memory Reads: 6 Total Memory Writes: 1 7-

W 0x337191

Tag = 0x33719 Set = 0x1

Set 0 Set 1

MRU	LRU
0x33712 (D)	Invalid
0x33719 (D)	0x22593 (D)

Total Misses: 6 Total Hits: 1

Total Memory Reads: 6 Total Memory Writes: 1

8-

R 0x225933

Tag = 0x22593 Set = 0x1

MRU LRU
0x33712 (D) Invalid
0x22593 (D) 0x33719 (D)

Set 0 Set 1

Total Misses: 6 Total Hits: 2

Total Memory Reads: 6 Total Memory Writes: 1