Review Problem 43

Block Addr = Addr/Block size

2/4 = 6
32/4 = 8
0/1 = 0

Byte addresses: 0, 32, 0, 24, 32

How many misses will each have on this address pattern?

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Writing & Caches:

Direct-mapped cache with 16-byte blocks, initially empty.

-worthy Byte

Main Memory:

Cache Line:

: flop x1, f x31, #8

L: flop x0, [x31, #0]
Write-Buffer: accept to process the write to you.

Write-back: set cache block from fixed memory.
Fill the empty sets of cache blocks from fixed memory. Per-byte write.

Alternative: per-byte write.

Write-through to cache only.

Be slow! Write Buffer. Write-back to memory, write cache disks to memory.

Foot-on-write.

If doesn't use cache, bits cache has fixed data. Slow!

Bad a write buffer can help.