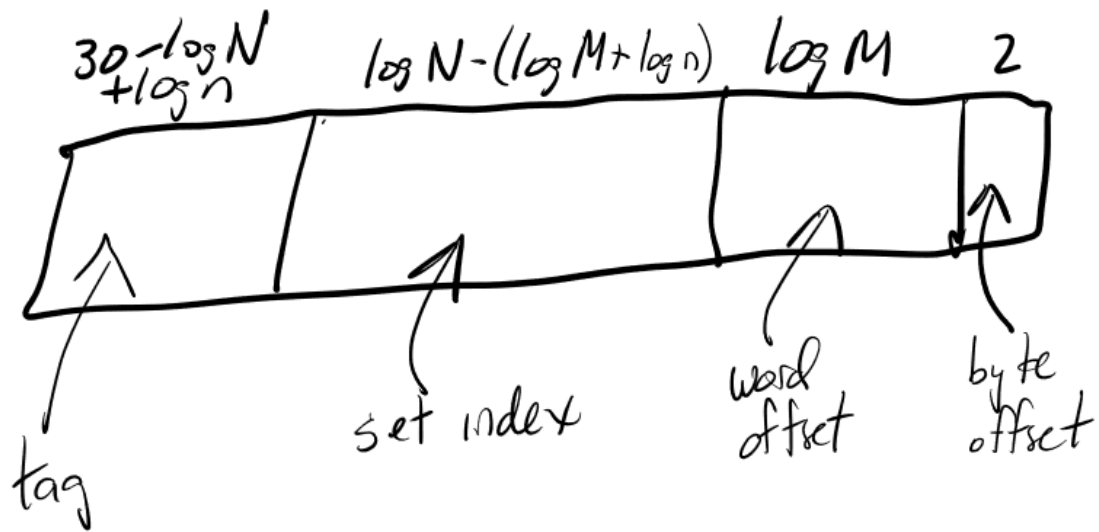


Cache



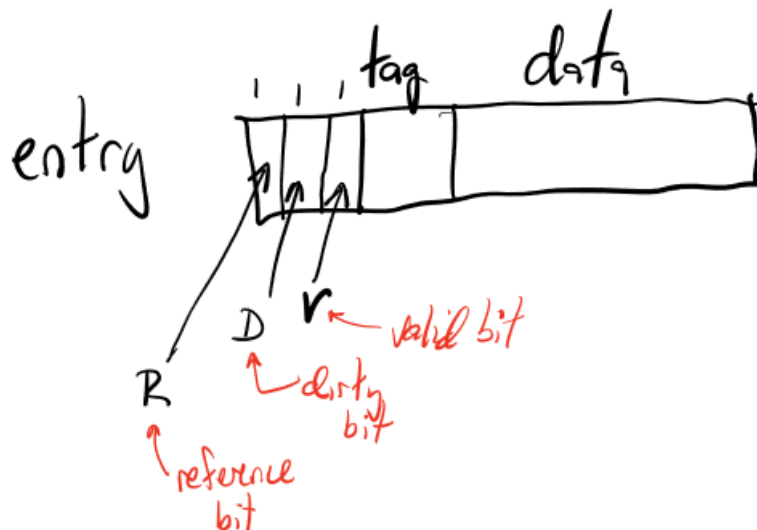
M words/cache line — $\log M$ bits

$N/(M \cdot n)$ set/cache — $\log N - (\log M + \log n)$ bits

N words/cache

N/M cache lines/cache

n cache line/set



v: validation bit, whether it is a cache hit

d: dirty bit, whether the data in the cache entry has been modified

r: reference bit, which cache entry was used (referenced) recently