Streaming

5.5.1
In a 64KiB direct-mapped cache, there exists 512K/32 = 16K misses, Hence the miss rate is 6.25% .

The miss rate is proportionate to the block size & doesn't change with cache size or working set.

Based on the 3C model, these misses are compulsory misses.

5.5.2
Number of misses In 16byte = 512K/16 = 32K.
miss rate = 12.5%

Number of misses in 64byte = 512K/64 = 8K.
miss rate = 3.125%

Number of misses in 128byte = 512K/128 = 4K.
miss rate = 1.5625%