Write the number of cache hits and misses for each scheme in the table below:

	Hits	Misses
Direct Mapped		
2-way Set Associative		
4-way Set Associative		
Fully Associative		

4. (4 points) Associative Caches

Suppose we have a 512 KB, 4-way set associative cache with a 32-byte line size. For 32-bit addresses,

(a) (1 point) Which bits would be used to specify the byte offset? Give your answer in either the form b_8–b_4 or 8:4.

   1:0

(b) (1 point) Which bits would be used to specify the block offset?

   4:2

(c) (1 point) Which bits would be used to specify the index?

   16:5

(d) (1 point) Which bits would be used to specify the tag?

   31:17