

Practice problems for Final. These will NOT be graded.

**Problem 1.** Do problems 7.1, 7.2, 7.3 on page 628 of PH.

**Problem 2.** Assume you have a word addressable machine with  $2^{20}$  words of memory. Assume it has a four-way set associative cache that stores a total of eight blocks, where the block size is sixteen words.

- (a) Draw a picture of the cache.
- (b) What bits are associated to the cache index, to the block, and to the tag.
- (c) Where in the cache can word with address

10110011010101111101

be stored?

**Problem 3.** Do problem 7.8 on page 628 of PH.

**Problem 4.** Do problem 7.32 on page 632 of PH.