

Homework #4, 5 points

Due Wednesday, 29 October at the beginning of class or by e-mail before the beginning of class. (Los Alamos students: having the proctor fax them to me or send them via courier is also okay as long as they're stamped as having been turned in Wednesday). Half credit if turned in before the test on Friday, 31 October. There will be no extension.

You can always stop by my office or e-mail if you have any questions or need help, but you can also e-mail me your answers and I'll reply with which ones are right and which ones are wrong.

#1. (5 points, 1 point each). For each of the following paging schemes in "a + b + c ..." notation, where each subsequent number is the number of bits used to index increasing levels of page tables and the last number is the number of bits used to index within a page, write the size of each page, the number of entries in each second-level page table, the number of paging levels, and the size of the virtually addressable address space. No calculator necessary, write a power of 2 if you must. The first (the Pentium) is done for you. If an entry does not apply, write "N/A".

	Page size	# Entries in second level page table	# Levels	Virtually addressable address space
10+10+12	4 KB	1024	2	$2^{32} = 4\text{GB}$
12+20				
10+10+10+13				
8+8+16				
10+10+10+12				
9+9+9+20				