

Name: _____ Box: _____

Virtual Address	
Page #	Offset

TLB	
Page #	Frame #
16	848
53	100
4	324
80	226
5	900

Physical Address	
Frame #	Offset

Page	Table	Ptr
256		

Register
Interrupt Indicator

For each of the following virtual addresses, determine whether or not there is a TLB hit, if not determine if a page fault occurs, and if a page fault does not occur, translate the virtual address to a physical address.

1. 4|105

2. 18|640

3. 16|105

(2 points) Consider a TLB which holds n items. Express your answers in big-O notation.

4. What is the lookup time for the TLB?

5. What is the primary disadvantage of a TLB?

(8 points) Complete the following summary table.

	Advantages	Disadvantages
Single level page table		
Two level page table		
Inverted page table with hashing		
Translation look-aside buffer		