## Worksheet 08

- 1. The size of page offset(w) determines \_\_\_\_\_ and p determines \_\_\_\_\_.
  - a. Number of pages in logical address
  - b. Number of words in a page.
  - c. Number of frames in the physical memory.

	р	w
0	0	0
	0	1
1	1	0
	1	1

- 2. An address consists of a 6-bit page number and a 2-bit offset.
  - a. Number of pages= \_\_\_\_\_
  - b. Page size =\_\_\_\_\_
  - c. The address (2, 1) denotes the binary address \_\_\_\_\_.
- 3. Consider a logical address space of 64 pages of 1,024 words each, mapped onto a physical memory of 32 frames.
  - a. How many bits are there in the logical address?
  - b. How many bits are there in the physical address?
- 4. With a page size of 512 words and a program size of 1550 words, \_\_\_\_\_ words are lost to internal fragmentation.
- 5. A page table (PT) has the following contents.

Page Number	Frame number
0	5
1	6
2	
3	9
4	12

Page size = 512 words. Given the logical address (LA) = 1780, determine the following: Page number p , Offset w and Frame number f.

6. A page table (PT) has the following contents.

Page Number	Frame number
0	6
1	
2	10
3	13
4	7
	••••

Page size = 512 words. Given the logical address LA = 350, determine the following: Page number p , Offset w , Frame number f and physical address.