

CSCI 3150 Introduction to Operating Systems
Basic Assignment 4 Solution & Marking Scheme
Total Marks: 100

1 Calculation (20 marks)

1. 256 bytes (4 marks)
2. 8 bits (4 marks)
3. 4 marks each

First level: 2 bits Second level: 3 bits Offset: 3 bits

2 Address Translation (50 marks)

- 51 is mapped (5 marks) and its physical address is 43 (10 marks)
- 72 is not mapped (10 marks)
- 172 is mapped (5 marks) and its physical address is 68 (10 marks)
- 200 is not mapped (10 marks)

3 Page Mapping Setup (30 marks)

10 marks for each segment

- PFN@PT=10

	PT@ PFN=10
0	
	0
	1
	2
7	

- PFN@PT=11

	PT@ PFN=11
0	4
	5
	6
	7

7	
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• PFN@PT=12

	PT@ PFN=12
0	
	8
7	9