

HW4

Due	Dec 2 at 2pm	Points	1	Questions	3	Available	Nov 25 at 11:59pm - Dec 4 at 11:59pm 9 days	Time Limit	60 Minutes	Allowed Attempts	Unlimited
-----	--------------	--------	---	-----------	---	-----------	---	------------	------------	------------------	-----------

This quiz was locked Dec 4 at 11:59pm.

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	4 minutes	1 out of 1
LATEST	Attempt 2	4 minutes	1 out of 1
	Attempt 1	less than 1 minute	0 out of 1

Score for this attempt: 1 out of 1
Submitted Dec 2 at 12:09pm
This attempt took 4 minutes.

Question 1

0.3 / 0.3 pts

Given the cost of address translation as CAT, cost of TLB lookup as CTLBL, cost of a full translation as CFT, and the likelihood that TLB has the entry cached as P(hit), then we can calculate CAT as

CAT = + CFT (1 -)

Answer 1:

CTLBL

Correct

Answer 2:

CFT

Correct

Answer 3:

P(hit)

Correct

Question 2

0.2 / 0.2 pts

If a cache is , then all updates are sent immediately onward to memory. If the cache is , then updates can be stored in the cache, and only sent to memory when the cache runs out of space and needs to evict a block to make room for a new memory block.

Answer 1:

write-through

Correct

Answer 2:

write-back

Correct

Question 3

0.5 / 0.5 pts

Suppose RV=3,2,4,3,4,2,2,3,4,5,6,7,7,6,5,4,5,6,7,2 is a page reference stream. Given a page frame allocation of 3 and assuming the primary memory is initially unloaded, show the details of memory replacement of MN algorithm by filling the following table.

Frame	3	2	4	3	4	2	2	3	4	5	6	7	7	6	5	4
0	3	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5
1	NONE	2	2	2	2	2	2	2	2	2	6	6	6	6	6	6
2	NONE	NONE	4	4	4	4	4	4	4	4	4	7	7	7	7	4

Answer 1:

3

Correct

Answer 2:

3

Correct

Answer 3:

3

Correct

Answer 4:

3

Correct

Answer 5:

3

Correct

Answer 6:

3

Correct

Answer 7:

3

Correct

Answer 8:

3

Correct

Answer 9:

3

Correct

Answer 10:

5

Correct

Answer 11:

5

Correct

Answer 12:

5

Correct

Answer 13:

5

Correct

Answer 14:

5

Correct

Answer 15:

5

Correct

Answer 16:

5

Correct

Answer 17:

5

Correct

Answer 18:

NONE

Correct

Answer 19:

2

Correct

Answer 20:

2

Correct

Answer 21:

2

Correct