AMADEO, CARL MARLO

BSCPE - 4

CPECL 481 - H2

c.

	FIFO			LRU	
PAGE REF.	PAGE FRAMES	PAGE FAULT		PAGE FRAMES	PAGE FAULT
2	2	/		2	/
3	2 3	/		3 2	/
6	2 3 6 4	/		6 3 2	
4	2 3 6 4	/		4 6 3 2	
6	2 3 6 4	X		6 4 3 2	X
3	2 3 6 4	X		3 6 4 2	X
1	1 3 6 4	/		1 3 6 4	/
2	1 2 6 4	/		2 1 3 6	/
4	1 2 6 4	X		4 2 1 3	/
6	1 2 6 4	X		6 4 2 1	/

d.) 8 for FIFO & 6 for LRU

7.

$64/4 = 16$ FRAMES

SIZE OF FRAME $= 512$ KB$/16$

$= 32$ KB

8. LRU PAGE REPLACEMENT ALGO.

PAGE REFERENCE	PAGE FRAMES	PAGE FAULT		PAGE REFERENCE	PAGE FRAMES	PAGE FAULT
				1	178	X
0	0	/		2	217	/
9	90	/		8	821	/
0	09	X		2	281	X
1	109	/		7	728	/
8	810	/		8	872	X
1	180	X		2	287	X
8	810	X		3	328	/
7	781	/		8	832	X
8	871	X		3	382	X
7	781	X				

LRU PAGE FAULTS $= 10$

9. $EAT(A) = h \times 15 + (1-h) \times 50$ $EAT(B)$

$$= h \times 10 + (1-h) \times 70$$

$5h + 50 - 50h = 10h + 70 - 70h - 35h$

$20h = -20/35$

$h = -4/7 = $ NOT VALID BECAUSE IT CAN'T BE NEGATIVE

SO, THERE IS NO CACHE HIT RATIO.

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10. $EAT = h \times 10 + (1-h) \times 60$

$15 = h \times 10 + (1-h) \times 60$

$15 = 10h + 40 - 60h$

$45 = 50h$

$h = 45/50$ or 0.9

HIT RATIO 0.9 or 90%