NAME _____DATE_____Grade:_____/50

For each of the following program segments, execute the program one instruction at a time. At the end of each instruction execution, indicate any changed in registers, condition flags, and/or memory locations. Note that the result of any instruction may be an operand for succeeding instructions.

	N	Z	V	C	D2	A2
	0	0	1	1	AAAA 0000	8888 8888
MOVEA.W #$A000,A2	0	0	1	1	no change	FFFF A000
MOVE.W #$2233,D2	0	0	0	0	AAAA 2233	no change
MOVE.L D2,(A2)	1	0	0	0	no change	no change

00A000	44	
00A001	44	
00A002	44	
00A003	44	
FFA000	44	AA
FFA001	44	AA
FFA002	44	22
FFA003	44	33

$1104 − 4 = $1100

$1104 + W = $1106

	N	Z	V	C	D1	A1
	0	1	0	0	1111 1100	0000 1104
MOVE.W (A1)+,-4(A1)	0	0	0	0	no change	0000 1106
MOVE.L -(A1),D1	0	0	0	0	7172 7172	0000 1102

$1106 − L = $1102

001100	61	
001101	62	
001102	63	71
001103	64	72
001104	71	
001105	72	
001106	73	
001107	74	

$0100 + 0002 = $0102

$0102 + 4 = $0106

	N	Z	V	C	D4	A4
	1	0	0	1	BBBB 0002	0000 0100
MOVE.W (A4),4(A4,D4.W)	1	0	0	0	no change	no change
ADDI.W #$406,D4	0	0	0	0	BBBB 0408	no change
MOVE.W $0104,2(A4)	1	0	0	0	no change	no change

000100	E1	
000101	E2	
000102	E3	F1
000103	E4	F2
000104	F1	
000105	F2	
000106	F3	E1
000107	F4	E2

$0006 + 0002 = $0008

$0008 + 102 = $010A

$010A − 4 = $0106

$00FA + 0002 = $00FC

$00FC + 8 = $0104

	N	Z	V	C	D3	PC
	0	1	1	1	1111 1111	0000 00FA
MOVE.W $8(PC),D3	0	0	0	0	1111 5453	don't try
	1	0	1	1	1111 0102	0000 0006
MOVE.W -4(PC,D3.W),$100	0	0	0	0	no change	don't try

000100	58	52
000101	57	51
000102	56	
000103	55	
000104	54	
000105	53	
000106	52	
000107	51	