

Last name: First name: Group:

ANSWER SHEET TO BE HANDED IN**Exercise 1**

Instruction	Memory	Register
Example	\$005000 54 AF 00 40 E7 21 48 C0	A0 = \$00005004 A1 = \$0000500C
Example	\$005008 C9 10 11 C8 D4 36 FF 88	No change
MOVE.W #18, -6(A2)	\$005008 C9 10 00 12 D4 36 1F 88	No change
MOVE.W \$5004, 3(A0, D0.W)	\$005008 C9 10 E7 21 D4 36 1F 88	No change
MOVE.B 5(A1), \$18(A1, D1.L)	\$005008 C9 10 11 C8 D4 36 1F 36	No change
MOVE.L -\$8(A1), -1(A2, D2.W)	\$005008 C9 10 11 C8 54 AF 18 B9	No change

Exercise 2

Operation	Size (bits)	Missing Number (hexadecimal)	N	Z	V	C
\$7F + \$?	8	\$01	1	0	1	0
\$98BD + \$?	16	\$6743	0	1	0	1
\$98BD + \$?	32	\$80000000	1	0	0	0

Exercise 3

Values of registers after the execution of the program. Use the 32-bit hexadecimal representation.	
D1 = \$00000001	D3 = \$00002206
D2 = \$00000022	D4 = \$0000000B

Exercise 4

```
CopyInc    movem.l  d0/a1/a2,-(a7)

\loop      move.b   (a1)+,(a2)+
           subq.l   #1,d0
           bne      \loop

           movem.l  (a7)+,d0/a1/a2
           rts
```

```
CopyDec    move.l   d0,-(a7)

           adda.l   d0,a1
           adda.l   d0,a2

\loop      move.b   -(a1),-(a2)
           subq.l   #1,d0
           bne      \loop

           move.l   (a7)+,d0
           rts
```

```
Copy       tst.l    d0
           beq      \quit

           cmpa.l   a1,a2
           beq      \quit
           blo      \inc

\dec       jsr      CopyDec
           rts

\inc       jsr      CopyInc
\quit      rts
```