



```

MM      MM      TTTTTTTTTT  HH      HH      JJ      IIIIII  SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MM      MM      TTTTTTTTTT  HH      HH      JJ      IIIIII  SSSSSSSS  IIIIII  GGGGGGGG  NN      NN
MMMM    MMMM    TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MMMM    MMMM    TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG        NN      NN
MM      MM      TT          HHHHHHHHHH  JJ      JJ      II       SSSSSS  II       GG        NN      NN
MM      MM      TT          HHHHHHHHHH  JJ      JJ      II       SSSSSS  II       GG        NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GGGGGG  NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GGGGGG  NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GG      NN      NN
MM      MM      TT          HH      HH      JJ      II       SS        II       GG      GG      NN      NN
MM      MM      TT          HH      HH      JJ      IIIIII  SSSSSSSS  IIIIII  GGGGGG  NN      NN
MM      MM      TT          HH      HH      JJJJJJ  IIIIII  SSSSSSSS  IIIIII  GGGGGG  NN      NN

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II     SS
LL      II     SS
LL      II     SS
LL      II     SS
LL      II     SSSSSS
LL      II     SSSSSS
LL      II     SS
LL      II     SS
LL      II     SS
LL      IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLLLL IIIIII  SSSSSSSS

```

(2) 48  
(3) 57  
(4) 83

HISTORY ; Detailed Current Edit History  
DECLARATIONS  
MTH\$JISIGN

MT  
Sy  
MA  
MT  
MT  
  
PS  
--  
\_M  
  
Ph  
--  
In  
Co  
Pa  
Sy  
Pa  
Sy  
Ps  
Cr  
As  
  
Th  
15  
Th  
14  
0  
  
Ma  
--  
\_S  
O  
Th  
MA

```
0000 1 .TITLE MTHSJISIGN JISIGN function
0000 2 .IDENT /1-002/ ; File: MTHJISIGN.MAR
0000 3
0000 4
0000 5 *****
0000 6 *
0000 7 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0000 23 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 FACILITY: MATH LIBRARY
0000 30 ++
0000 31 ABSTRACT:
0000 32
0000 33
0000 34 --
0000 35
0000 36 VERSION: 0
0000 37
0000 38 HISTORY:
0000 39
0000 40 AUTHOR:
0000 41 Jonathan M. Taylor, 14-JUL-77: Version 0
0000 42
0000 43 MODIFIED BY:
0000 44
0000 45
0000 46
```

MTHSJISIGN  
1-002

D 4  
JISIGN function 16-SEP-1984 01:45:16 VAX/VMS Macro V04-00 Page 2  
HISTORY ; Detailed Current Edit History 6-SEP-1984 11:26:28 [MTHRTL.SRC]MTHJISIGN.MAR;1 (2)

```
0000 48 .SBTTL HISTORY ; Detailed Current Edit History
0000 49
0000 50
0000 51 : Edit History for Version 0 of MTHJISIGN
0000 52 :
0000 53 : 0-2 - Remove MTH$FLAG_JACKET. TNH 5-July-78
0000 54 : 1-001 - Update version number and copyright notice. JBS 16-NOV-78
0000 55 : 1-002 - Add "_" to the PSECT directive. JBS 22-DEC-78
```

```
0000 5;          .SBTTL DECLARATIONS
0000 58
0000 59 :
0000 60 : INCLUDE FILES:
0000 61 :
0000 62 :
0000 63 :
0000 64 : EXTERNAL SYMBOLS:
0000 65 :
0000 66 :
0000 67 :
0000 68 : MACROS:
0000 69 :
0000 70 :
0000 71 :
0000 72 : PSECT DECLARATIONS:
0000 73 :   .PSECT _MTH$CODE          PIC, SHR, LONG, EXE, NOWRT
0000 74 :
0000 75 :
0000 76 : EQUATED SYMBOLS:
0000 77 :
0000 78 :
0000 79 :
0000 80 : OWN STORAGE:
0000 81 :
```

```

0000 83      .SBTTL MTH$JISIGN
0000 84
0000 85      :++
0000 86      : FUNCTIONAL DESCRIPTION:
0000 87      :
0000 88      :
0000 89      : CALLING SEQUENCE:
0000 90      :     NONE
0000 91      :
0000 92      :
0000 93      : INPUT PARAMETERS:
0000 94      :     NONE
0000 95      :
0000 96      : IMPLICIT INPUTS:
0000 97      :     NONE
0000 98      :
0000 99      : OUTPUT PARAMETERS:
0000 100     :     NONE
0000 101     :
0000 102     : IMPLICIT OUTPUTS:
0000 103     :     NONE
0000 104     :
0000 105     : COMPLETION CODES:
0000 106     :     NONE
0000 107     :
0000 108     : SIDE EFFECTS:
0000 109     :     NONE
0000 110     :
0000 111     :--
0000 112
0000 113
0000 114     .ENTRY MTH$JISIGN,      ^M<>
50  04 BC 0000 115     MOVL  @4(AP), R0      ; R0 = arg1
   09 19 0006 116     BLSS  NEGARG      ; branch if negative arg1
   0008 117
   0008 118     ; arg1 is non-negative, look at sign of arg2
   0008 119     :
08  03 BC 0008 120     TSTL  @8(AP)
   18 0008 121     BGEQ  .EXIT      ; both args are positive, nothing to do
50  50 CE 000D 122     NEGATE: MNEGL  R0, R0      ; negate arg1
   04 0010 123     EXIT:
   0011 124     RET
   0011 125
   0011 126
   0011 127     ; arg1 is negative, check sign of arg2
   0011 128     :
   0011 129     NEGARG:
08  03 BC 0011 130     TSTL  @8(AP)
   18 0014 131     BGEQ  NEGATE      ; if arg2 positive then negate arg1
   04 0016 132     RET
   0017 133
   0017 134
   0017 135     .END

```

MTH\$JISIGN  
Symbol table

JISIGN function

G 4

16-SEP-1984 01:45:16 VAX/VMS Macro V04-00 Page 5  
6-SEP-1984 11:26:28 [MTHRTL.SRC]MTHJISIGN.MAR;1 (4)

|             |          |    |    |
|-------------|----------|----|----|
| EXIT        | 00000010 | R  | 01 |
| MTH\$JISIGN | 00000000 | RG | 01 |
| NEGARG      | 00000011 | R  | 01 |
| NEGATE      | 0000000D | R  | 01 |

-----  
! Psect synopsis !  
-----

| PSECT name | Allocation      | PSECT No. | Attributes |     |     |     |       |       |      |       |       |      |  |
|------------|-----------------|-----------|------------|-----|-----|-----|-------|-------|------|-------|-------|------|--|
| ABS        | 00000000 ( 0.)  | 00 ( 0.)  | NOPIC USR  | CON | ABS | LCL | NOSHR | NOEXE | NORD | NOWRT | NOVEC | BYTE |  |
| _MTH\$CODE | 00000017 ( 23.) | 01 ( 1.)  | PIC USR    | CON | REL | LCL | SHR   | EXE   | RD   | NOWRT | NOVEC | LONG |  |

-----  
! Performance indicators !  
-----

| Phase                  | Page faults | CPU Time    | Elapsed Time |
|------------------------|-------------|-------------|--------------|
| Initialization         | 41          | 00:00:00.05 | 00:00:01.40  |
| Command processing     | 115         | 00:00:00.48 | 00:00:03.83  |
| Pass 1                 | 67          | 00:00:00.36 | 00:00:01.76  |
| Symbol table sort      | 0           | 00:00:00.00 | 00:00:00.00  |
| Pass 2                 | 37          | 00:00:00.32 | 00:00:01.23  |
| Symbol table output    | 2           | 00:00:00.01 | 00:00:00.01  |
| Psect synopsis output  | 2           | 00:00:00.02 | 00:00:00.08  |
| Cross-reference output | 0           | 00:00:00.00 | 00:00:00.00  |
| Assembler run totals   | 266         | 00:00:01.24 | 00:00:08.32  |

The working set limit was 900 pages.  
1328 bytes (3 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 4 non-local and 0 local symbols.  
135 source lines were read in Pass 1, producing 10 object records in Pass 2.  
0 pages of virtual memory were used to define 0 macros.

-----  
! Macro library statistics !  
-----

| Macro library name                  | Macros defined |
|-------------------------------------|----------------|
| -----                               | -----          |
| _\$255\$DUA28:[SYSLIB]STARLET.MLB;2 | 0              |

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:MTHJISIGN/OBJ=OBJ\$:MTHJISIGN MSRCS:MTHJISIGN/UPDATE=(ENHS:MTHJISIGN)



