


```

MM      MM      TTTTTTTTTT  HH      HH      IIIIII      IIIIII      SSSSSSSS      IIIIII      GGGGGGGG      NN      NN
MM      MM      TTTTTTTTTT  HH      HH      IIIIII      IIIIII      SSSSSSSS      IIIIII      GGGGGGGG      NN      NN
MMM     MMM     TT          HH      HH      II         II         SS          II         GG          NN      NN
MMM     MMM     TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HHHHHHHHHH  II         II         SSSSSS      II         GG          NN      NN
MM      MM      TT          HHHHHHHHHH  II         II         SSSSSS      II         GG          NN      NN
MM      MM      TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HH      HH      II         II         SS          II         GG          NN      NN
MM      MM      TT          HH      HH      IIIIII      IIIIII      SSSSSSSS      IIIIII      GGGGGG      NN      NN
MM      MM      TT          HH      HH      IIIIII      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      II         SS
LLLLLLLLLLLL  IIIIII      SSSSSSSS
LLLLLLLLLLLL  IIIIII      SSSSSSSS

```

(2)	48	HISTORY	: Detailed Current Edit History
(3)	57	DECLARATIONS	
(4)	83	MTH\$IISIGN	

```

0000 1      .TITLE MTHSIISIGN      IISIGN function
0000 2      .IDENT /1-002/          ; File: MTHSIISIGN.MAR
0000 3
0000 4
0000 5 *****
0000 6 *
0000 7 *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 10 *
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0000 21 *
0000 22 *  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
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 :

```

MTH\$IISIGN
1-002

E 16
16-SEP-1984 01:42:55 VAX/VMS Macro V04-00
6-SEP-1984 11:26:04 [MTHRTL.SRC]MTH\$IISIGN.MAR;1 Page 2
(2)

IISIGN function
HISTORY ; Detailed Current Edit History

0000 48 .SBTTL HISTORY ; Detailed Current Edit History
0000 49
0000 50
0000 51 ; Edit History for Version 0 of MTH\$IISIGN
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 57      .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$IISIGN
0000 84
0000 85      :++
0000 86      : FUNCTIONAL DESCRIPTION:
0000 87      :
0000 88      :
0000 89      : CALLING SEQUENCE:
0000 90      :     NONE
0000 91      :
0000 92      :
0000 93      : INPUT PARAMETERS:
0000 94      :     NONE
0000 95      :
0000 96      : IMPLICIT INPUTS:
0000 97      :     NONE
0000 98      :
0000 99      : OUTPUT PARAMETERS:
0000 100     :     NONE
0000 101     :
0000 102     : IMPLICIT OUTPUTS:
0000 103     :     NONE
0000 104     :
0000 105     : COMPLETION CODES:
0000 106     :     NONE
0000 107     :
0000 108     : SIDE EFFECTS:
0000 109     :     NONE
0000 110     :
0000 111     :--
0000 112
50  04 BC 0000 0000 113      .ENTRY  MTH$IISIGN,      ^M<>
0000 114      MOVW   @4(AP), R0      ; R0 = arg1
0000 115      BLSS  NEGARG      ; branch if negative arg
0000 116
0000 117      ; arg1 is non-negative, check sign of arg2
0000 118      :
0000 119      08 BC  B5 0008 119      TSTW   @8(AP)      ; check sign of arg2
0000 120      03 18 000B 120      BGEQ   EXIT      ; return if both positive
0000 121      000D 121 NEGATE:
0000 122      50 50 AE 000D 122      MNEGW  R0, R0      ; negate arg1
0000 123      0010 123 EXIT:
0000 124      04 0010 124      RET
0000 125
0000 126      ; arg1 is negative, check sign of arg2
0000 127      :
0000 128      0011 128 NEGARG:
0000 129      08 BC  B5 0011 129      TSTW   @8(AP)      ; test sign of arg2
0000 130      F7 18 0014 130      BGEQ   NEGATE      ; negate arg1 if arg2 positive
0000 131      04 0016 131      RET
0000 132
0000 133
0000 134      .END

```

MTH\$IISIGN
Symbol table

IISIGN function

H 16

16-SEP-1984 01:42:55
6-SEP-1984 11:26:04

VAX/VMS Macro V04-00
[MTHRTL.SRC]MTH\$IISIGN.MAR;1

Page 5
(4)

EXIT	00000010 R	01
MTH\$IISIGN	00000000 RG	01
NEGARG	00000011 R	01
NEGATE	0000000D R	01

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

<u>PSECT name</u>	<u>Allocation</u>	<u>PSECT No.</u>	<u>Attributes</u>												
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 !
+-----+

<u>Phase</u>	<u>Page faults</u>	<u>CPU Time</u>	<u>Elapsed Time</u>
Initialization	32	00:00:00.13	00:00:00.83
Command processing	114	00:00:00.46	00:00:03.19
Pass 1	70	00:00:00.40	00:00:02.64
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	37	00:00:00.31	00:00:01.55
Symbol table output	2	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	259	00:00:01.33	00:00:08.24

The working set limit was 750 pages.
 1320 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.
 134 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 !
+-----+

<u>Macro library name</u>	<u>Macros defined</u>
_\$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\$:MTH\$IISIGN/OBJ=OBJ\$:MTH\$IISIGN MSRC\$:MTH\$IISIGN/UPDATE=(ENH\$:MTH\$IISIGN)

