





(2)	49	HISTORY	; Detailed Current Edit History
(3)	56	DECLARATIONS	
(4)	82	MTH\$JIHNNT	- return nearest integer as INTEGER*4

```

0000 1      .TITLE MTHSJHNNT - Nearest Integer of H
0000 2      .IDENT /1-001/ ; File: MTHSJHNNT.MAR
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 8 :* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 9 :* ALL RIGHTS RESERVED.
0000 10 :*
0000 11 :* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0000 12 :* ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0000 13 :* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0000 14 :* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0000 15 :* OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0000 16 :* TRANSFERRED.
0000 17 :*
0000 18 :* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 19 :* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 20 :* CORPORATION.
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 : Return nearest integer of a REAL*16 to a INTEGER*4.
0000 34
0000 35 : --
0000 36
0000 37 : VERSION: 1
0000 38
0000 39 : HISTORY:
0000 40
0000 41 : AUTHOR:
0000 42 : Steven B. Lionel, 21-Aug-1979
0000 43
0000 44 : MODIFIED BY:
0000 45
0000 46
0000 47

```

MTH\$JIHNNT  
1-001

J 3  
- Nearest Integer of H 16-SEP-1984 01:44:56 VAX/VMS Macro V04-00 Page 2  
HISTORY ; Detailed Current Edit History 6-SEP-1984 11:26:27 [MTHRTL.SRC]MTH\$JIHNNT.MAR;1 (2)

0000 49 .SBTTL HISTORY ; Detailed Current Edit History  
0000 50  
0000 51  
0000 52 ; Edit History for Version 1 of MTH\$JIHNNT  
0000 53 ;  
0000 54 ; 1-001 - Original. SBL 21-Aug-79

```
0000 56      .SBTTL  DECLARATIONS
0000 57
0000 58 :
0000 59 : INCLUDE FILES:
0000 60 :
0000 61 :
0000 62 :
0000 63 : EXTERNAL SYMBOLS:
0000 64 :
0000 65 :
0000 66 :
0000 67 : MACROS:
0000 68 :
0000 69 :
0000 70 :
0000 71 : PSECT DECLARATIONS:
0000 72 : .PSECT  _MTH$CODE      PIC, SHR, LONG, EXE, NOWRT
0000 73 :
0000 74 :
0000 75 : EQUATED SYMBOLS:
0000 76 :
0000 77 :
0000 78 :
0000 79 : OWN STORAGE:
0000 80 :
```

```
0000 82      .SBTTL MTH$JIHNNT - return nearest integer as INTEGER*4
0000 83
0000 84      :++
0000 85      : FUNCTIONAL DESCRIPTION:
0000 86
0000 87      : Returns the nearest integer (rounded away from zero) of a
0000 88      : REAL*16 to a INTEGER*4 as a function value.
0000 89
0000 90      : CALLING SEQUENCE:
0000 91
0000 92      :         result.wl.v = MTH$JIHNNT (arg.rh.r)
0000 93
0000 94
0000 95      : INPUT PARAMETERS:
0000 96      :         arg = 4           ; H floating argument
0000 97
0000 98      : IMPLICIT INPUTS:
0000 99      :         NONE
0000 100
0000 101     : OUTPUT PARAMETERS:
0000 102     :         NONE
0000 103
0000 104     : IMPLICIT OUTPUTS:
0000 105     :         NONE
0000 106
0000 107     : FUNCTION VALUE:
0000 108     :         The argument rounded to the nearest longword integer away from
0000 109     :         zero.
0000 110
0000 111     : SIDE EFFECTS:
0000 112     :         Reserved operand, Integer overflow exceptions.
0000 113
0000 114     :--
0000 115
0000 116
0000 117
0000 118     .ENTRY MTH$JIHNNT,      ^M<IV>
50 04 BC 4000 0002 119     CVTRHL @arg(AP), R0      ; R0 = rounded argument
04 0007 120     RET
0008 121
0008 122
0008 123     .END
```

MTH\$JIHNNT  
Symbol table

- Nearest Integer of H

M 3

16-SEP-1984 01:44:56  
6-SEP-1984 11:26:27

VAX/VMS Macro V04-00  
[MTHRTL.SRC]MTHJIHNNT.MAR;1

Page 5  
(4)

ARG = 00000004  
MTH\$JIHNNT 00000000 RG 01

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

PSECT name	Allocation	PSECT No.	Attributes	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE	
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC	USR									
MTH\$CODE	00000008 ( 8.)	01 ( 1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.09	00:00:01.62
Command processing	116	00:00:00.42	00:00:03.23
Pass 1	65	00:00:00.36	00:00:01.82
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	40	00:00:00.27	00:00:01.19
Symbol table output	1	00:00:00.01	00:00:00.01
Psect synopsis output	3	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	256	00:00:01.17	00:00:07.89

The working set limit was 750 pages.  
1165 bytes (3 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 2 non-local and 8 local symbols.  
123 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\$:MTHJIHNNT/OBJ=OBJ\$:MTHJIHNNT MSRC\$:MTHJIHNNT/UPDATE=(ENH\$:MTHJIHNNT)



