

(2) 50
(3) 58
(4) 84

HISTORY ; Detailed Current Edit History
DECLARATIONS
MTH\$JIGNNT - return nearest integer as INTEGER*4

```

0000 1 .TITLE MTH$JIGNNT - Nearest Integer
0000 2 .IDENT /1-002/ ; File: MTHJIGNNT.MAR
0000 3
0000 4
0000 5 :*****
0000 6 :*
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0000 24 :*
0000 25 :*
0000 26 :*****
0000 27 :
0000 28
0000 29
0000 30 : FACILITY: MATH LIBRARY
0000 31 :++
0000 32 : ABSTRACT:
0000 33 :
0000 34 : Return nearest integer of a G REAL*8 to a INTEGER*4.
0000 35 :
0000 36 :--
0000 37
0000 38 : VERSION: 1
0000 39
0000 40 : HISTORY:
0000 41
0000 42 : AUTHOR:
0000 43 : Steven B. Lionel, 05-Feb-79: Version 1
0000 44
0000 45 : MODIFIED BY:
0000 46
0000 47
0000 48 :

```

MTHSJIGNNT
1-002

C 3
- Nearest Integer 16-SEP-1984 01:44:38 VAX/VMS Macro V04-00 Page 2
HISTORY ; Detailed Current Edit History 6-SEP-1984 11:26:25 [MTHRTL.SRC]MTHSJIGNNT.MAR;1 (2)

0000 50 .SBTTL HISTORY ; Detailed Current Edit History
0000 51
0000 52
0000 53 ; Edit History for Version 1 of MTHSJIGNNT
0000 54 ;
0000 55 ; 1-001 - Original. SBL 05-Feb-79
0000 56 ; 1-002 - Use CVTRGL. SBL 21-Aug-1979

```
0000 58      .SBTTL  DECLARATIONS
0000 59
0000 60 :
0000 61 : INCLUDE FILES:
0000 62 :
0000 63 :
0000 64 :
0000 65 : EXTERNAL SYMBOLS:
0000 66 :
0000 67 :
0000 68 :
0000 69 : MACROS:
0000 70 :
0000 71 :
0000 72 :
0000 73 : PSECT DECLARATIONS:
0000 74 : .PSECT  _MTH$CODE      PIC, SHR, LONG, EXE, NOWRT
0000 75 :
0000 76 :
0000 77 : EQUATED SYMBOLS:
0000 78 :
0000 79 :
0000 80 :
0000 81 : OWN STORAGE:
0000 82 :
```

- Nearest Integer

MTH\$JIGNNT - return nearest integer as I

0000 84 .SBTTL MTH\$JIGNNT - return nearest integer as INTEGER*4

0000 85

0000 86 :++

0000 87 : FUNCTIONAL DESCRIPTION:

0000 88

0000 89 : Returns the nearest integer (rounded away from zero) of a G

0000 90 : REAL*8 to a INTEGER*4 as a function value.

0000 91

0000 92 : CALLING SEQUENCE:

0000 93

0000 94 : nearest_int.wl.v = MTH\$JIGNNT (arg.rg.r)

0000 95

0000 96

00000004

0000 97 : INPUT PARAMETERS:

0000 98 : arg = 4 ; G floating argument

0000 99

0000 100 : IMPLICIT INPUTS:

0000 101 : NONE

0000 102

0000 103 : OUTPUT PARAMETERS:

0000 104 : NONE

0000 105

0000 106 : IMPLICIT OUTPUTS:

0000 107 : NONE

0000 108

0000 109 : FUNCTION VALUE:

0000 110 : nearest_integer - The integer nearest to arg, rounded
0000 111 : away from zero.

0000 112

0000 113 : SIDE EFFECTS:

0000 114 : Reserved operand, Integer overflow exceptions.

0000 115

0000 116 :--

0000 117

0000 118

0000 119

50 04 BC 4000
4BFD
04

0000 120 : .ENTRY MTH\$JIGNNT, ^M<IV>

0002 121 : CVTRGL @arg(AP), R0 ; R0 = rounded arg

0007 122 : RET

0008 123

C308 124

0008 125 : .END

MTHSJIGNNT
Symbol table

- Nearest Integer

F 3

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

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(4)

ARG = 00000004
MTHSJIGNNT 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

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	30	00:00:00.11	00:00:01.00
Command processing	132	00:00:00.51	00:00:03.25
Pass 1	63	00:00:00.35	00:00:01.95
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	39	00:00:00.31	00:00:01.52
Symbol table output	1	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	269	00:00:01.32	00:00:07.76

The working set limit was 750 pages.
1181 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 0 local symbols.
125 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\$:MTHJIGNNT/OBJ=OBJ\$:MTHJIGNNT MSRC\$:MTHJIGNNT/UPDATE=(ENH\$:MTHJIGNNT)

