Mathematics with the HP48G Calc

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1 Vector Algebra

1.1 Cross Product: Example 1

A first basic example is given as follows:

$$A = \begin{bmatrix} 2 \\ 2 \\ 3 \end{bmatrix} \tag{1}$$

$$B = \begin{bmatrix} 4 \\ 2 \\ 5 \end{bmatrix} \tag{2}$$

You may search for the cross-product with $A \times B = C$ It gives:

$$C = \begin{bmatrix} 4 \\ 2 \\ -4 \end{bmatrix} \tag{3}$$

- Example (1) using the HP48G
  - You may enter [2 2 3]
  - You may enter [4 2 5]
  - In order to calculate the cross product, the "CROSS" function in the HP48G/HP50G will allow to give the solution:
  - The solution is: [4 2 $-$ 4]


x48-0.6.4
HEWLETT PACKARD 48GX
128K RAM
{ HOME }
4:
3:
2: [2 2 3]
1: [4 2 5]
ABS DOT CROSS V→ →V2 →V3
wire: /dev/pts/19
IR: none
RAD POLAR CHARS MODES MEMORY STACK PREV MENU
MTH PRG CST VAR NXT
UP HOME DEF RCL →NUM UNDO PICTURE VIEW SWAP
STO EVAL
ASIN ∂ ACOS ∫ ATAN Σ LOG LN
SIN COS TAN
EQUATION MATRIX EDIT CMD PURG ARG CLEAR DROP
ENTER +/- EEX DEL
USER ENTRY SOLVE PLOT SYMBOLIC
TIME STAT UNITS
I/O LIBRARY EQ LIB
CONT OFF
ON
CANCEL
SPC


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HEWLETT PACKARD 48GX
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4:
3:
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1: [4 2 -4]
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