

Programming the same task

On an HP-41,

HP-71B,

HP 50g,

and HP Prime

Goal:

Create a program called PCH which  
inputs two numbers (**A** and **B**)  
and returns  
**%Change(A,B)**  
and  
**%Change(B,A)**  
showing the positive one first  
(or on the bottom of the stack).

Example:

Input 4 and 5.

Return 25 and -20,  
because going from 4 to 5  
is +25% change,  
and going from 5 to 4  
is -20% change.

## HP-41

[GTO] [.] [.]

[PRGM]

LBL "PCH"

X>Y? X<>Y %CH

X<>Y LASTX X<>Y %CH

X<>Y RDN END

[PRGM]

4 [ENTER] 5 [XEQ] "PCH" (or [R/S])

## HP-71B

EDIT PCH

10 INPUT "A, B? ";A,B

20 IF A<B THEN VARSWAP A,B

30 DISP 100\*(A-B)/A;

40 DISP 100\*(B-A)/B

50 END

RUN PCH (or just [RUN])

4,5 [ENTER]

## HP 50g

« MAX LASTARG MIN  
%CH LASTARG SWAP %CH »

‘PCH’ STO

4 [ENTER] 5 PCH (or use VAR menu)

## HP Prime

[Shift] [Program]

[New] PCH

EXPORT PCH(A,B)

BEGIN

LOCAL T;

T:=MAX(A,B);

A:=MIN(A,B);

B:=T;

RETURN { %CHANGE(A,B), %CHANGE(B,A) };

END;

[Home]

PCH(4,5)

(or use Vars menu)