

HP-38G

Systems of Linear Equations Program

This program will display the solution of a system of two linear equations in two variables of the form

$$ax + by = c$$

$$dx + ey = f$$

if a unique solution exists.

1. Input the 2 programs SOLVE and SOLVE.SOLN.
2. Run the SOLVE program.

SOLVE

SOLVE PROGRAM

INPUT A;"AX+BY=C";

"ENTER A";" ";1:

INPUT B;"AX+BY=C";

"ENTER B";" ";1:

INPUT C;"AX+BY=C";

"ENTER C";" ";1:

INPUT D;"DX+EY=F";

"ENTER D";" ";1:

INPUT E;"DX+EY=F";

"ENTER E";" ";1:

INPUT F;"DX+EY=F";

"ENTER F";" ";1:

ERASE:

IF AE-DB==0

THEN DISP 3; "NO UNIQUE SOLUTION":

ELSE RUN "SOLVE.SOLN":

END:

FREEZE:

SOLVE.SOLN PROGRAM

(CE-BF)/(AE-DB)►X:

(AF-CD)/(AE-DB)►Y:

DISP 3;"X="X:

DISP 5;"Y="Y:

Visualizing Row Operations Program not available