

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
PROGRAM:SIMPINT
:FIX 2
:DISP "PRINCIPAL"
:INPUT P
:DISP "INTEREST RATE"
:DISP "IN DECIMAL FORM"
:INPUT R
:DISP "NUMBER OF YEARS"
:INPUT T
:PRT →I
:DISP "THE INTEREST IS"
:DISP I
:FLOAT
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c .

```
PROGRAM:QUADRAT
:DISP "AX^2+BX+C=0"
:INPUT "ENTER A",A
:INPUT "ENTER B",B
:INPUT "ENTER C",C
:B^2-4AC →D
:IF D≥0
:THEN
:(-B+√D)/(2A) →M
:DISP M
:(-B-√D)/(2A) →N
:DISP N
:ELSE
:DISP "NO REAL SOLUTION"
:END
```

Two-Point Form of a Line

This program will display the slope and y -intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
PROGRAM:TWOPTFM
:DISP "ENTER X1, Y1"
:INPUT X
:INPUT Y
:DISP "ENTER X2, Y2"
:INPUT C
:INPUT D
:(D-Y)/(C-X) →M
:M×(-X)+Y →B
:DISP "SLOPE ="
:DISP M
:DISP "Y-INT ="
:DISP B
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in $Y1$ and set a viewing rectangle.

```
PROGRAM:REFLECT
:47XMIN/63 →YMIN
:47XMAX/63 →YMAX
:XSCL →YSCL
:"X" →Y2
:DISPGRAPH
:(XMAX-XMIN)/62 →I
:XMIN →X
:LBL A
:PT-ON(Y1,X)
:X+I →X
:If X>XMAX
:STOP
:GOTO A
```

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.

```
PROGRAM:SOLVE
:DISP "AX+BY=C"
:INPUT "ENTER A",A
:INPUT "ENTER B",B
:INPUT "ENTER C",C
:DISP "DX+EY=F"
:INPUT "ENTER D",D
:INPUT "ENTER E",E
:INPUT "ENTER F",F
:IF AE-DB=0
:THEN
:DISP "NO UNIQUE"
:DISP "SOLUTION"
:ELSE
:(CE-BF)/(AE-DB) → X
:(AF-CD)/(AE-DB) → Y
:DISP X
:DISP Y
:END
```

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
Prgm1:SIMPINT
:Fix 2
:Disp "PRINCIPAL"
:Input P
:Disp "INTEREST RATE"
:Disp "IN DECIMAL FORM"
:Input R
:Disp "NUMBER OF YEARS"
:Input T
:PRT →I
:Disp "THE INTEREST IS"
:Disp I
:Float
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c .

```
Prgm3: QUADRAT
:Disp "ENTER A"
:Input A
:Disp "ENTER B"
:Input B
:Disp "ENTER C"
:Input C
: $B^2 - 4AC \rightarrow D$ 
:If  $D < 0$ 
:Goto 1
: $((-B + \sqrt{D}) / (2A)) \rightarrow M$ 
:Disp M
: $((-B - \sqrt{D}) / (2A)) \rightarrow N$ 
:Disp N
:End
:Lbl 1
:Disp "NO REAL"
:Disp "SOLUTION"
:End
```

Two-Point Form of a Line Program

This program will display the slope and y -intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
Prgm2:TWOPTFM
:Disp "ENTER X1, Y1"
:Input X
:Input Y
:Disp "ENTER X2, Y2"
:Input C
:Input D
: $(D - Y) / (C - X) \rightarrow M$ 
: $M * (-X) + Y \rightarrow B$ 
:Disp "SLOPE ="
:Disp M
:Disp "Y-INT ="
:Disp B
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in Y_1 and set a viewing rectangle.

```
Prgm4:REFLECT
:2Xmin/3 → Ymin
:2Xmax/3 → Ymax
:Xscl → Yscl
:"X" → Y2
:DispGraph
: $(Xmax - Xmin) / 95 \rightarrow I$ 
:Xmin → X
:Lbl 1
:Pt-On(Y1,X)
:X+I → X
:If  $X > Xmax$ 
:End
:Goto 1
```

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.

```
Prgm5:SOLVE
:Disp "AX+BY=C"
:Input A
:Input B
:Input C
:Disp "DX+EY=F"
:Input D
:Input E
:Input F
:If AE-DB=0
:Goto 1
:(CE-BF)/(AE-DB)→X
:(AF-CD)/(AE-DB)→Y
:Disp X
:Disp Y
:End
:Lbl 1
:Disp "NO UNIQUE SOLUTION"
:End
```

TI-82 TI-83

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
PROGRAM:SIMPINT
:Fix 2
:Disp "PRINCIPAL"
:Input P
:Disp "INTEREST RATE"
:Disp "IN DECIMAL FORM"
:Input R
:Disp "NUMBER OF YEARS"
:Input T
:PRT → I
:Disp "THE INTEREST IS"
:Disp I
:Float
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c .

```
PROGRAM:QUADRAT
:Disp "AX^2+BX+C=0"
:Prompt A
:Prompt B
:Prompt C
: $B^2 - 4AC \rightarrow D$ 
:If  $D \geq 0$ 
:Then
: $(-B + \sqrt{D}) / (2A) \rightarrow M$ 
:Disp M
: $(-B - \sqrt{D}) / (2A) \rightarrow N$ 
:Disp N
:Else
:Disp "NO REAL SOLUTION"
:End
```

Two-Point Form of a Line Program

This program will display the slope and y -intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
PROGRAM:TWOPTFM
:Disp "ENTER X1, Y1"
:Input X
:Input Y
:Disp "ENTER X2, Y2"
:Input C
:Input D
: $(D - Y) / (C - X) \rightarrow M$ 
: $M * (-X) + Y \rightarrow B$ 
:Disp "SLOPE ="
:Disp M
:Disp "Y-INT ="
:Disp B
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in Y_1 and set a viewing rectangle.

```
PROGRAM:REFLECT
:63Xmin/95 → Ymin
:63Xmax/95 → Ymax
:Xscl → Yscl
:"X" → Y2
:DispGraph
: $(Xmax - Xmin) / 94 \rightarrow I$ 
:Xmin → X
:While  $X \leq Xmax$ 
:Pt-On(Y1,X)
:X+I → X
:End
```

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.

PROGRAM:SOLVE

:Disp "AX+BY=C"

:Prompt A

:Prompt B

:Prompt C

:Disp "DX+EY=F"

:Prompt D

:Prompt E

:Prompt F

:If AE-DB=0

:Then

:Disp "NO UNIQUE"

:Disp "SOLUTION"

:Else

:(CE-BF)/(AE-DB)→X

:(AF-CD)/(AE-DB)→Y

:Disp X

:Disp Y

:End

TI-85 TI-86

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
PROGRAM:SIMPINT
:Fix 2
:Disp "Principal"
:Input P
:Disp "Interest rate"
:Disp "in decimal form"
:Input R
:Disp "Number of years"
:Input T
:P*R*T → I
:Disp "The interest is"
:Disp I
:Float
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c . This program gives both real and complex answers. Solutions of a quadratic equation are also available directly by using the POLY function.

```
PROGRAM:QUADRAT
:Disp "AX^2+BX+C=0"
:Input "ENTER A",A
:Input "ENTER B",B
:Input "ENTER C",C
:B^2-4*A*C → D
:(-B+√D)/(2A) → M
:Disp M
:(-B-√D)/(2A) → N
:Disp N
```

Two-Point Form of a Line Program

This program will display the slope and y -intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
PROGRAM:TWOPTFM
:Disp "ENTER X1, Y1"
:Input X
:Input Y
:Disp "Enter X2, Y2"
:Input C
:Input D
:(D-Y)/(C-X) → M
:M*(-X)+Y → B
:Disp "Slope ="
:Disp M
:Disp "Y-int ="
:Disp B
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in $y1$ and set a viewing rectangle.

```
PROGRAM:REFLECT
:63*xMin/127 → yMin
:63*xMax/127 → yMax
:xScl → yScl
:y2=x
:DispG
:(xMax-xMin)/126 → I
:xMin → x
:Lbl A
:PtOn(y1,x)
:x+I → x
:If x>xMax
:Stop
:Goto A
```

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.

PROGRAM:SOLVE

:Disp "AX+BY=C"

:Input "ENTER A",A

:Input "ENTER B",B

:Input "ENTER C",C

:Disp "DX+EY=F"

:Input "ENTER D",D

:Input "ENTER E",E

:Input "ENTER F",F

:If A*E-D*B==0

:Goto A

:(C*E-B*F)/(A*E-D*B) → X

:(A*F-C*D)/(A*E-D*B) → Y

:Disp X

:Disp Y

:Stop

:Lbl A

:Disp "NO UNIQUE SOLUTION"

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
:simpint ( )
:Prgm
:setMode("Display Digits","Fix 2")
:Input "Principal",p
:Input "Interest rate in decimal form",r
:Input "Number of years",t
:p*r*t → i
:Disp "The interest is",i
:setMode("Display Digits","Float")
:EndPrgm
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c . This program gives both real and complex answers.

```
:quadrat ( )
:Prgm
:setMode("Complex Format","RECTANGULAR")
:Disp "AX ^ 2 + BX + C = 0"
:Input "Enter A.",a
:Input "Enter B.",b
:Input "Enter C.",c
:b ^ 2 - 4*a*c → d
:(-b + √(d))/(2*a) → m
:(-b - √(d))/(2*a) → n
:Disp m
:Disp n
:setMode("Complex Format","REAL")
:EndPrgm
```

Two-Point Form of a Line Program

This program will display the slope and y -intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
:twoptfm ( )
:Prgm
:Disp "ENTER X1, Y1"
:Input x
:Input y
:Disp "ENTER X2, Y2"
:Input c
:Input d
:(d - y)/(c - x) → m
:m*-x + y → b
:Disp "SLOPE ="
:Disp m
:Disp "Y-INT ="
:Disp b
:EndPrgm
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in $y1$ and set a viewing rectangle.

```
:reflect ( )
:Prgm
:103xmin/239 → ymin
:103xmax/239 → ymax
:xscl → yscl
:x → y2(x)
:DispG
:(xmax - xmin)/238 → n
:xmin → x
:While x < xmax
: PtOn y1(x),x
: x+n → x
:EndWhile
:EndPrgm
```

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.

```
:solvelin( )
:Prgm
:ClrIO
:Disp "Ax+By=C"
:Input "Enter A.",a
:Input "Enter B.",b
:Input "Enter C.",c
:ClrIO
:Disp "Dx+Ey=F"
:Input "Enter D.",d
:Input "Enter E.",e
:Input "Enter F.",f
:If a*e-d*b=0 Then
:  Disp "No unique solution"
: Else
:  (c*e-b*f)/(a*e-d*b) → x
:  (a*f-c*d)/(a*e-d*b) → y
:  Disp x
:  Disp y
:EndIf
:EndPrgm
```

Casio fx-7700G

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
SIMPINT
Fix 2
"PRINCIPAL"? → P
"INTEREST RATE"
"IN DECIMAL FORM"? → R
"NUMBER OF YEARS"? → T
PRT → I
"THE INTEREST IS":I▲
Norm
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c .

```
QUADRAT
"AX2+BX+C=0"
"A="? → A
"B="? → B
"C="? → C
B2-4AC → D
D<0 ⇒ Goto 1
"X=":(-B+√D)÷(2A)▲
"OR X=":(-B-√D)÷(2A)
Goto 2
Lbl 1
"NO REAL SOLUTION"
Lbl 2
```

Two-Point Form of a Line

This program will display the slope and y-intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
TWOPTFM
"ENTER X1, Y1"? → X:? → Y
"ENTER X2, Y2"? → C:? → D
(D-Y)÷(C-X) → M
M×(-X)+Y → B
"SLOPE =" :M▲
"Y-INT =" :B
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in f1.

```
REFLECT
"GRAPH -A TO A"
"A="? → A
Range -A,A,1,-2A÷3,2A÷3,1
Graph Y=f1
-A → B
Lbl 1
B → X
Plot f1,B
B+A÷32 → B
B≤A ⇒ Goto1 :Graph Y=X
```

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.

```
SOLVE
"AX+BY=C"
"A="? → A
"B="? → B
"C="? → C
"DX+EY=F"
"D="? → D
"E="? → E
"F="? → F
AE-DB=0 ⇒ Goto 1
"X=":(CE-BF)÷(AE-DB)▲
"Y=":(AF-CD)÷(AE-DB)
Goto 2
Lbl 1
"NO UNIQUE SOLUTION"
Lbl 2
```

Casio fx-7700GE
Casio fx-9700GE
Casio CFX-9800G
Casio CFX-9850G

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

SIMPINT
 Fix 2↵
 “PRINCIPAL”? → P↵
 “INTEREST RATE”↵
 “IN DECIMAL FORM”? → R↵
 “NUMBER OF YEARS”? → T↵
 PRT → I↵
 “THE INTEREST IS”:I▲
 Norm

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words “No Real Solution.” To use the program, write the quadratic equation in general form and enter the values of a , b , and c .

Casio fx-7700GE

Solutions to quadratic equations are also available directly from the Casio calculator’s EQUATION MODE.

QUADRAT
 “ $AX^2+BX+C=0$ ”↵
 “A=”? → A↵
 “B=”? → B↵
 “C=”? → C↵
 B^2-4AC → D↵
 $D < 0 \Rightarrow$ Goto 1↵
 $(-B + \sqrt{D}) \div (2A)$ ▲
 $(-B - \sqrt{D}) \div (2A)$ ↵
 Goto 2↵
 Lbl 1↵
 “NO REAL SOLUTION”↵
 Lbl 2

Casio fx-9700GE

Casio CFX-9800G

Casio CFX-9850G

Both real and complex answers are given. Solutions to quadratic equations are also available directly from the Casio calculator’s EQUATION MODE.

QUADRAT
 “ $AX^2+BX+C=0$ ”↵
 “A=”? → A↵
 “B=”? → B↵
 “C=”? → C↵
 B^2-4AC → D↵
 $(-B + \sqrt{D}) \div (2A)$ ▲
 $(-B - \sqrt{D}) \div (2A)$

Two-Point Form of a Line

This program will display the slope and y -intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

TWOPTFM
 “ENTER X1, Y1”? → X: ? → Y↵
 “ENTER X2, Y2”? → C: ? → D↵
 $(D - Y) \div (C - X)$ → M↵
 $M \times (-X) + Y$ → B↵
 “SLOPE =”:M▲
 “Y-INT =”:B

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, enter the function in f1.

Casio fx-7700GE

To use this program, enter the function in f1.

REFLECT
 “GRAPH -A TO A”↵
 “A=”? → A↵
 Range -A,A,1,-2A÷3,2A÷3,1↵
 Graph Y=f1↵
 -A → B↵
 Lbl 1↵
 B → X↵
 Plot f1,B↵
 $B+A \div 32$ → B↵
 $B \leq A \Rightarrow$ Goto1:Graph Y=X

Casio fx-9700GE

To use this program, enter a function in f_1 and set a viewing rectangle.

```
REFLECT
63Xmin÷127 → A↵
63Xmax÷127 → B↵
Xscl → C↵
Range , , , A, B, C↵
(Xmax-Xmin)÷126 → I↵
Xmax → M↵
Xmin → D↵
Graph Y=f1↵
Lbl 1↵
D → X↵
Plot f1,D↵
D+I → D↵
D≤M⇒Goto 1:Graph Y=X
```

Casio CFX-9800G

To use this program, enter a function in f_1 and set a viewing rectangle.

```
REFLECT
63Xmin÷95 → A↵
63Xmax÷95 → B↵
Xscl → C↵
Range , , , A, B, C↵
(Xmax-Xmin)÷94 → I↵
Xmax → M↵
Xmin → D↵
Graph Y=f1↵
Lbl 1↵
D → X↵
Plot f1,D↵
D+I → D↵
D≤M⇒Goto 1:Graph Y=X
```

Casio CFX-9850G

Use the program for the Casio fx-9700GE and replace the line “Range , , , A,B,C,↵” with “View Window , , , A,B,C,↵.”

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. Solutions to systems of linear equations are also available directly from the Casio calculator’s EQUATION MENU.

```
SOLVE
“AX+BY=C”↵
“A=:”? → A↵
“B=:”? → B↵
“C=:”? → C↵
“DX+EY=F”↵
“D=:”? → D↵
“E=:”? → E↵
“F=:”? → F↵
AE-DB=0⇒Goto 1↵
“X:“(CE-BF)÷(AE-DB)▲
“Y:“(AF-CD)÷(AE-DB)↵
Goto 2↵
Lbl 1↵
“NO UNIQUE SOLUTION”↵
Lbl 2
```

Sharp EL-9200C Sharp EL-9300C

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
simpint
-----REAL
Input principal
Print "Interest rate
Print "in decimal form
Input rate
Print "Number of years
Input time
interest=principal*rate*time
Print interest
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c . This program gives both real and complex answers.

```
quadratic
-----COMPLEX
Print "ax2+bx+c=0"
Input a
Input b
Input c
d=b2-4a*c
x1=(-b+√ d)/(2a)
x2=(-b-√ d)/(2a)
Print x1
Print x2
End
```

Two-Point Form of a Line

This program will display the slope and y-intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
twoptform
Print "enter x1, y1
Input x
c=x
Input y
d=y
Print "enter x2, y2
Input x
Input y
m=(d-y)/(c-x)
b=m*(-x)+y
Print "slope
Print m
Print "y-int
Print b
```

Graph Reflection Program

This program will graph a function f and its reflection in the line $y = x$. To use this program, replace $f(X)$ with your expression in X .

```
reflection
-----REAL
Goto top
Label equation
Y=f(X)
Return
Label rng
xmin=-10
xmax=10
xstp=(xmax-xmin)/10
ymin=2*xmin/3
ymax=2*xmax/3
ystp=xstp
Range xmin,xmax,xstp,ymin,
    ymax,ystp
Return
Label top
Gosub rng
Graph X
step=(xmax-xmin)/(94*2)
X=xmin
Label 1
Gosub equation
Plot X,Y
Plot Y, X
X=X+step
If X<=xmax Goto 1
End
```

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. Equations must be entered in the form: $AX + BY = C$; $DX + EY = F$. Uppercase letters are used so that the values can be accessed in the calculation mode of the calculator.

```
solve
-----REAL
Print "AX+BY=C"
Input A
Input B
Input C
Print "DX+EY=F"
Input D
Input E
Input F
If A*E-D*B=0 Goto 1
X=(C*E-B*F)/(A*E-D*B)
Y=(A*F-C*D)/(A*E-D*B)
Print X
Print Y
End
Label 1
Print "no unique solution"
End
```

HP-38G

Simple Interest Program

This program can be used to find the amount of simple interest earned on a given principal at a given annual interest rate for a certain amount of time.

```
SIMPINT PROGRAM
INPUT P; "SIMPINT"; "ENTER
PRINCIPAL";1:
INPUT R; "SIMPINT"; "INTEREST RATE IN DECIMAL
FORM";1:
INPUT T; "SIMPINT"; "ENTER NUMBER OF YEARS";1:
P*R*T►I:
DISP 3; "INTEREST IS" I:
FREEZE:
```

Quadratic Formula Program

This program will display the solutions of a quadratic equation or the words "No Real Solution." To use the program, write the quadratic equation in general form and enter the values of a , b , and c . This program displays the answer in complex form (x, y) , where x is the real part and y is the imaginary part.

```
QUADRAT PROGRAM
INPUT A;"AX2+BX+C=0";
"ENTER A";"";1:
INPUT B;"AX2+BX+C=0";
"ENTER B";"";1:
INPUT C;"AX2+BX+C=0";
"ENTER C";"";1:
B2-4AC►D:
(-B+√D)/(2A)►Z1:
(-B-√D)/(2A)►Z2:
DISP 3;Z1:
DISP 5;Z2:
FREEZE
```

Two-Point Form of a Line

This program will display the slope and y-intercept of the line that passes through two points, (x_1, y_1) and (x_2, y_2) , entered by the user.

```
TWOPTFM PROGRAM
INPUT X; "ENTER X1, Y1";
"ENTER X1";1:
INPUT Y; "ENTER X1, Y1";
"ENTER Y1";1:
INPUT C; "ENTER X2, Y2";
"ENTER X2";1:
INPUT D; "ENTER X2, Y2";
"ENTER Y2";1:
(D-Y)/(C-X)►M
M*-X+Y►B
DISP 1;"SLOPE ="M:
DISP 3;"Y-INT ="B:
FREEZE:
```

Graph Reflection Program not available

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:
```