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1 / SANTIAGO TUREGANO MORATALLA
2 / C/ROSARIO 26-30 2801 ALBACETE
10 REM ***** presentacion *****
20 ON BREAK GOSUB 1290
30 CLS:MODE 0
40 INK 0,16:INK 1,8:INK 2,15,24:INK
3,24,9:INK 4,9,6:INK 5,6,15:INK 6,14
50 BORDER 1:PAPER 0:CLS:PEN 1
60 LOCATE 6,9:PRINT "CONICAS"
70 FOR n=6 TO 12
80 LOCATE n,10:PRINT CHR$(208):NEXT
90 FOR n=1 TO 20:LOCATE n,15:PRINT C
HR$(218):NEXT
100 LOCATE 3,18:PRINT "AMSTRAD CPC46
4"
110 LOCATE 4,21:PRINT CHR$(164);"S.T
M.:985"
120 LOCATE 6,25:PRINT "<Space>"

130 WHILE INKEY(47)=-1:WEND
140 REM ***** presentacion de opcion
es *****
150 MODE 0: INK 2,15,24:INK 3,24,9:INK
4,9,6:INK 5,6,15:INK 6,14
160 PAPER 6:CLS :PRINT SPACE$(160)
170 SPEED INK 15,15
180 PEN 2:PRINT TAB(3);"1.CIRCUNFERE
NCIA"
190 PRINT
200 PEN 3:PRINT TAB (3);"2.ELIPSE"
210 PRINT
220 PEN 4:PRINT TAB(3);"3.HIPERBOLA"
230 PRINT
240 PEN 5:PRINT TAB (3);"4.PARABOLA"
250 K$=INKEY$:IF K$=""THEN 250 ELSE
K=VAL( K$)
260 IF K<1 OR K>4 THEN 250
270 REM ***** dibujo de los ejes ***
**
280 MODE 1:INK 0,13:INK 1,8:INK 2,6:
INK 3,1
290 PAPER 0:CLS
300 MOVE 0,200:DRAWR 640,0,1
310 MOVE 320,1:DRAWR 0,400,1
320 FOR J=0 TO 640 STEP 10
330 MOVE J,195:DRAWR 0,18:NEXT
340 FOR J=0 TO 400 STEP 10
350 MOVE 315,J:DRAWR 18,0:NEXT
360 ON K GOSUB 390,550,730,1010
370 GOTO 150
380 REM ***** circunferencia *****
390 LOCATE 1,23:INPUT "Centro x=";x
400 LOCATE 1,24:INPUT "Centro y=";y
410 ORIGIN 320,200
420 X=10*x:Y=10*y
430 GOSUB 1190
440 LOCATE 1,25:INPUT "Radio r=";r
450 R=10*r
460 ORIGIN 320+X,200+Y
470 MOVER 0,R
480 DEG:FOR n=0 TO 360 STEP 5
490 DRAW R*SIN(n),R*COS(n),2

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500 NEXT
510 LOCATE 32,25:PRINT "<Space>"
520 WHILE INKEY(47)=-1:WEND
530 RETURN
540 REM ***** ellipse *****
550 LOCATE 1,22:INPUT "Centro x=";x
560 LOCATE 1,23:INPUT "Centro y=";y
570 X=18*x:Y=18*y :ORIGIN 320,200:GO
SUB 1190
580 LOCATE 1,24:INPUT "Semieje x=";a
590 LOCATE 1,25:INPUT "Semieje y=";b
600 A=18*a:B=18*b
610 ORIGIN 320+X,200+Y
620 MOVE -A,0
630 FOR p=-A TO A STEP 10
640 q=SQR(B^2*(1-p^2/A^2))
650 DRAW p,q,2:NEXT
660 FOR p=A TO -A STEP -10
670 q=-SQR(B^2*(1-p^2/A^2))
680 DRAW p,q,2 :NEXT
690 LOCATE 32,25:PRINT "<Space>"
700 WHILE INKEY(47)=-1:WEND
710 RETURN
720 REM ***** Hiperbola *****

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730 LOCATE 1,22:INPUT "Centro x=";x
740 LOCATE 1,23:INPUT "Centro y=";y
750 ORIGIN 320,200
760 X=10*x:Y=10*y:GOSUB 1190
770 LOCATE 1,24:INPUT "a=";a
780 LOCATE 1,25:INPUT "b=";b
790 A=10*a:B=10*b
800 ORIGIN 320+X,200+Y
810 MOVE A,0
820 FOR p=A TO 320-X STEP 10
830 q=SQR(B^2*(p^2/A^2-1))
840 DRAW p,q,2:NEXT
850 MOVE A,0
860 FOR p=A TO 320-X STEP 10
870 q=-SQR(B^2*(p^2/A^2-1))
880 DRAW p,q,2:NEXT
890 MOVE -A,0
900 FOR p=-A TO -320-X STEP -10
910 q=SQR(B^2*(p^2/A^2-1))
920 DRAW p,q,2:NEXT
930 MOVE -A,0
940 FOR p=-A TO -320-X STEP -10
950 q=-SQR(B^2*(p^2/A^2-1))
960 DRAW p,q,2:NEXT
970 LOCATE 32,25:PRINT "<Space>"
980 WHILE INKEY(47)=-1:WEND
990 RETURN
1000 REM ***** Parabola *****
1010 LOCATE 1,22:INPUT "Vertice x=";x
1020 LOCATE 1,23:INPUT "Vertice y=";y
1030 ORIGIN 320,200
1040 X=10*x:Y=10*y:GOSUB 1190
1050 LOCATE 1,24:INPUT "d. foco=";f
1060 F=10*f
1070 ORIGIN 320+X,200+Y
1080 FOR p=0 TO 320-X STEP 10
1090 q=SQR(2*F*p)
1100 DRAW p,q,2:NEXT
1110 MOVE 0,0
1120 FOR p=0 TO 320-X STEP 10
1130 q=-SQR(2*F*p)
1140 DRAW p,q,2:NEXT
1150 LOCATE 32,25:PRINT "<Space>"
1160 WHILE INKEY(47)=-1:WEND
1170 RETURN
1180 REM ***** subrutina de dibujo d
e coordenadas del centro *****
1190 IF Y<=0 THEN q=Y-5 ELSE q=0
1200 IF X<=0 THEN w=0 ELSE w=Y+5
1210 FOR j=q TO w STEP 10
1220 MOVE X,j:DRAWR 0,5:NEXT
1230 IF X<=0 THEN q=X-5 ELSE q=0
1240 IF Y<=0 THEN w=0 ELSE w=X+5
1250 FOR j=q TO w STEP 10
1260 MOVE j,Y:DRAWR 5,0:NEXT
1270 RETURN
1280 REM ***** obtencion de listado
*****
1290 MODE 1:INK 0,1:INK 1,24:PAPER 0
:CLS:PEN 1:LIST 10-1270

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