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10 REM      CURVA DO DRAGAO
20 REM AMSTRAD MAGAZINE 1988
30 REM ----SO PARA CPC.-----
40 DEFINT A-Z
50 MODE 1:PRINT"Prova 4 e 12"
60 INPUT"Tamaho, ordem? :",SZ,OD:DIM STACK(OD):STACK(0)=OD
65 CLS
70 DRAW 638,0,3:DRAW 0,399:DRAW 0,399:DRAW 0,0:PLOT 1000,1000,1
80 MOVE 450,100
90 GOSUB 130
100 WHILE INKEY$<>"":WEND
110 WHILE INKEY$="":WEND
120 END
130 REM ** CURVA RECURSIVA **
140 SP=SP+1
150 IF STACK(SP-1)=0 THEN SP=SP-1:GOSUB 210:RETURN
160 STACK(SP)=STACK(SP-1)-1:GOSUB 130
170 D=D+1 AND 3
180 STACK(SP)=STACK(SP-1)-1:GOSUB 130
190 D=D-1 AND 3
200 SP=SP-1:RETURN
210 REM **** DESENHA ****
220 IF D=0 THEN DRAWR SZ,0
230 IF D=1 THEN DRAWR 0,SZ
240 IF D=2 THEN DRAWR -SZ,0
250 IF D=3 THEN DRAWR 0,-SZ
260 RETURN
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10 MODE 2: INK 0, 26: INK 1, 0: ORIGIN 320, 105: R=0.4: I=0.18: WHILE 1: XN=X-Y+R: YN=2*X  
+I: PLOT 280*XN, 280*YN: X=XN: Y=YN: WEND
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10 INPUT "Numero: ", N
20 PRINT FNFACTORIAL(N)
30 END
40 DEF FNFACTORIAL(N)
50 IF N=1 THEN =N ELSE =N*FNFACTORIAL(N-1)
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10 REM          FRACTAIS CPC
20 REM          AMSTRAD MAGAZINE
30 REM          (C) AGOSTO DE 1988
40 REM          --- SO PARA O CPC ---
50 MODE 2: I(0)=0: I(1)=10: I(2)=14: I(3)=26
60 GOSUB 1320: GOSUB 1340: MX=99
70 FOR T=1 TO MX: POKE 33999+T, (T MOD 3)+1: NEXT
80 X1=-2.3*X2=1.1: Y1=-1.19: Y2=1.19
90 REM          --- INICIALIZA O ECRA ---
100 MODE 1: PRINT CHR$(23); CHR$(0)
110 WINDOW#0, 1, 40, 24, 25
120 WINDOW#1, 1, 40, 1, 22
130 WINDOW#2, 1, 40, 25, 25
140 WINDOW#3, 1, 40, 23, 23
150 PAPER#3, 1: PAPER#2, 1
160 CLS#3: PAPER 1
170 REM          --- CICLO DO MENU PRINCIPAL ---
180 GOSUB 1120
190 IF INKEY$("<") THEN 190
200 LOCATE 1, 1
210 PRINT "G=GRAVAR C=CARREGAR Z=ZOOM"
220 PRINT "E=EXECUTAR 123=TINTA";
230 A$=UPPER$(INKEY$)
240 IF A$("<")="G" THEN 350
250 REM          --- GRAVAR ECRA ---
260 FOR T=0 TO 4: POKE &C7D0+T, I(T)
270 POKE &C7D8+T, PEEK(@X1+T)
280 POKE &C7E0+T, PEEK(@X2+T)
290 POKE &C7E8+T, PEEK(@Y1+T)
300 POKE &C7F0+T, PEEK(@Y2+T): NEXT
310 CLS#2: LOCATE 9, 2
320 INPUT "Nome: ", A$: CLS#2
330 SAVE A$, B, &C000, &3F80
340 GOTO 190
350 IF A$("<")="E" THEN 490
360 REM          --- EXECUTAR UM PADRAO ---
370 CLS#2: LOCATE 6, 2: INPUT "X1"; X1
380 IF ABS(X1)>3 THEN 370
390 CLS#2: LOCATE 6, 2: INPUT "X2"; X2
400 IF ABS(X2)>3 THEN 390
410 IF X2<X1 THEN 370
420 CLS#2: LOCATE 6, 2: INPUT "Y1"; Y1
430 IF ABS(Y1)>2 THEN 420
440 Y2=Y1+(X2-X1)*0.7: GOSUB 1120
450 GOSUB 1180
460 CLS#1: CLS#2: LOCATE 11, 2
470 PRINT "CRIANDO O DESENHO"
480 CALL 32768, MX: GOTO 200
490 IF A$("<")="C" THEN 610
500 REM          --- CARREGAR UM PADRAO ---
510 CLS#2: LOCATE 7, 2
520 INPUT "Nome: ", A$: LOAD A$
530 FOR T=0 TO 4: I(T)=PEEK(&C7D0+T)
540 POKE (@X1+T), PEEK(&C7D8+T)
550 POKE (@X2+T), PEEK(&C7E0+T)
560 POKE (@Y1+T), PEEK(&C7E8+T)
570 POKE (@Y2+T), PEEK(&C7F0+T)
580 NEXT
590 GOSUB 1320: GOTO 180
600 REM          --- MUDANCA DE CORES ---
610 VA=VAL(A$)
620 IF VA<1 OR VA>3 THEN 650
630 I(VA)=(I(VA) MOD 26)+1
640 GOSUB 1320
650 IF A$("<")="Z" THEN 230
660 REM          --- ROTINA DE ZOOM ---
670 CLS#2: LOCATE 9, 2
680 PRINT "CANTO INFERIOR ESQUERDO";
690 X=0: Y=48: PRINT CHR$(23); CHR$(1)
700 P=X: Q=Y

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710 MOVE X,48:DRAW 0,350,3
720 MOVE 0,Y:DRAW 638,0
730 IF INKEY(18)=0 THEN 820
740 IF INKEY(8)=0 AND X>0 THEN P=X-2
750 IF INKEY(1)=0 AND X<630 THEN P=X+2
760 IF INKEY(0)=0 AND Y<390 THEN Q=Y+2
770 IF INKEY(2)=0 AND Y>48 THEN Q=Y-2
780 IF P=X AND Q=Y THEN 730
790 MOVE X,48:DRAW 0,350
800 MOVE 0,Y:DRAW 638,0
810 X=P:Y=Q:GOTO 710
820 IF INKEY(18) THEN 820
830 CLS#2:LOCATE 10,2
840 PRINT"CANTO SUPERIOR DIREITO"
850 X=P+4:Y=Q+(X-P)*0.55:A=X
860 MOVE X,48:DRAW 0,350
870 MOVE 0,Y:DRAW 638,0
880 IF INKEY(18)=0 THEN 960
890 IF INKEY(2) AND INKEY(8) THEN 910
900 IF X-4>P THEN A=X-2:GOTO 930
910 IF INKEY(0) AND INKEY(1) THEN 880
920 IF X<638 AND Y<398 THEN A=X+2
930 MOVE X,48:DRAW 0,350
940 MOVE 0,Y:DRAW 638,0
950 X=A:Y=Q+(X-P)*0.55:GOTO 860
960 CLS#2:LOCATE 13,2
970 PRINT"ESTA CORRECTO (S/N)"
980 IF INKEY$<>"" THEN 990
990 I$=UPPER$(INKEY$)
1000 IF I$="S" THEN 1060
1010 IF I$<>"N" THEN 990
1020 MOVE X,48:DRAW 0,350
1030 MOVE 0,Y:DRAW 638,0
1040 MOVE P,48:DRAW 0,350
1050 MOVE 0,Q:DRAW 638,0:GOTO 190
1060 S=(X2-X1)/638:X2=X1+X*S
1070 X1=X1+P*S:S=(Y2-Y1)/352
1080 Y2=Y1+(Y-48)*S:Y1=Y1+(Q-48)*S
1090 PRINT CHR$(23);CHR$(0)
1100 GOSUB 1110:GOTO 450
1110 REM --- IMPRIME AS COORDENADAS ---
1120 CLS:PEN#3,0:PRINT#3,"X: ";:PEN#3,3
1130 PRINT#3,USING"+#.#### ";X1;X2;
1140 PEN#3,0:PRINT#3,"Y: ";:PEN#3,3
1150 PRINT#3,USING"+#.#### ";Y1;Y2;
1160 PEN 3:RETURN
1170 REM --- INICIALIZA QUADROS ---
1180 CLS#2:LOCATE 12,2:S=(X2-X1)/319
1190 PRINT"INICIALIZANDO QUADROS"
1200 FOR X=0 TO 319:P=X*5+35000
1210 V=X1+S*X:GOSUB 1250:NEXT
1220 S=(Y2-Y1)/176
1230 FOR Y=0 TO 176:P=Y*5+37000
1240 V=Y1+S*Y:GOSUB 1250:NEXT:RETURN
1250 IF V<0 THEN Q=255 ELSE Q=0
1260 POKE P+4,Q:E=ABS(V):POKE P,INT(E)
1270 E=(E-INT(E))*256:POKE P+1,INT(E)
1280 E=(E-INT(E))*256:POKE P+2,INT(E)
1290 E=(E-INT(E))*256:POKE P+3,INT(E)
1300 RETURN
1310 REM --- FIXA AS CORES ---
1320 BORDER 1(1):INK 0,I(0):INK 1,I(1)
1330 INK 2,I(2):INK 3,I(3):RETURN
1340 REM --- CODIGO MAQUINA ---
1350 LOCATE 27,12:PRINT"INICIALIZANDO,
ESPERE POR FAVOR..."
1360 DIREC=&8000:L=1600
1370 MEMORY &7FFF:RESTORE
1380 READ A$
1390 C=0:SOM=0

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1400 WHILE A$<>"FIM"
1410 POKE DIREC, VAL("&" + A$)
1420 K = ((C/2) = (C\2))
1430 IF K=0 THEN K=1
1440 SOM=SOM+K*VAL("&" + A$)
1450 C=C+1:DIREC=DIREC+1
1460 IF C<8 THEN 1530
1470 READ A
1480 IF SOM=A THEN 1510
1490 PRINT"ERRO NA LINHA"; L
1500 END
1510 C=0:L=L+10
1520 SOM=0
1530 READ A$
1540 WEND
1550 READ A
1560 IF SOM=A THEN 1590
1570 PRINT"ERRO NA LINHA"; L
1580 END
1590 RETURN
1600 DATA DD, 7E, 00, 32, A2, 83, CD, FE, -27
1610 DATA 82, 3E, 18, 32, A0, 83, 21, 88, 32
1620 DATA 90, 22, 9C, 83, 3A, A0, 83, 6F, -53
1630 DATA 26, 00, 29, 22, A4, 83, 2A, 9C, 36
1640 DATA 83, 11, 33, 83, ED, A0, ED, A0, -188
1650 DATA ED, A0, ED, A0, ED, A0, 22, 9C, -109
1660 DATA 83, AF, 32, 9E, 83, 32, 9F, 83, 43
1670 DATA 21, B8, 88, 22, 9A, 83, 2A, 9E, 142
1680 DATA 83, 29, 22, A6, 83, 2A, 9A, 83, -70
1690 DATA 11, 2E, 83, ED, A0, ED, A0, ED, 289
1700 DATA A0, ED, A0, ED, A0, 22, 9A, 83, 5
1710 DATA ED, 5B, A6, 83, 2A, A4, 83, 3E, -128
1720 DATA 03, CD, DE, BB, ED, 5B, A6, 83, -14
1730 DATA 2A, A4, 83, CD, EA, BB, CD, BE, 134
1740 DATA 80, 3A, A2, 83, 47, 3A, 42, 83, -49
1750 DATA B8, 3E, 00, CA, 8B, 80, 3A, 42, 77
1760 DATA 83, DD, 21, D0, 84, 32, 8A, 80, 173
1770 DATA DD, 7E, 00, CD, DE, BB, ED, 5B, -71
1780 DATA A6, 83, 2A, A4, 83, CD, EA, BB, 114
1790 DATA 3E, 42, CD, 1E, BB, C0, 2A, 9E, -50
1800 DATA 83, 23, 22, 9E, 83, 7C, FE, 01, -232
1810 DATA C2, 3E, 80, 7D, FE, 40, C2, 3E, -457
1820 DATA 80, 3A, A0, 83, 3C, 32, A0, 83, -138
1830 DATA FE, C8, C2, 14, 80, C9, CD, 09, -351
1840 DATA 83, CD, D4, 80, C0, 3A, A2, 83, -175
1850 DATA 47, 3A, 42, 83, B8, C8, 3C, 32, 58
1860 DATA 42, 83, 18, ED, 2A, 38, 83, 22, 195
1870 DATA 43, 83, 22, 48, 83, 2A, 3A, 83, 86
1880 DATA 22, 45, 83, 22, 4A, 83, CD, 46, -140
1890 DATA 82, 2A, 6E, 83, 22, 7F, 83, 2A, -63
1900 DATA 70, 83, 22, 81, 83, 2A, 72, 83, 42
1910 DATA 22, 83, 83, AF, 32, 87, 83, 32, 145
1920 DATA 90, 83, 2A, 3D, 83, 22, 43, 83, -27
1930 DATA 22, 48, 83, 2A, 3F, 83, 22, 45, 52
1940 DATA 83, 22, 4A, 83, CD, 46, 82, 2A, -263
1950 DATA 6E, 83, 22, 88, 83, 2A, 70, 83, 53
1960 DATA 22, 8A, 83, 2A, 72, 83, 22, 8C, 138
1970 DATA 83, CD, 00, 82, 3A, 91, 83, E6, 390
1980 DATA FC, C0, 2F, 32, 90, 83, CD, 00, -275
1990 DATA 82, 2A, 91, 83, 22, 7F, 83, 2A, -98
2000 DATA 93, 83, 22, 81, 83, 2A, 95, 83, -28
2010 DATA 22, 83, 83, 3A, 99, 83, 32, 87, 87
2020 DATA 83, 2A, 2E, 83, 22, 88, 83, 2A, 9
2030 DATA 30, 83, 22, 8A, 83, 21, 00, 00, 89
2040 DATA 22, 8C, 83, 22, 8E, 83, 3A, 32, -10
2050 DATA 83, 32, 90, 83, CD, 00, 82, 3A, -371
2060 DATA 41, 83, 32, 47, 83, 2A, 38, 83, 73
2070 DATA 22, 48, 83, 2A, 3A, 83, 22, 4A, 62
2080 DATA 83, 3A, 3C, 83, 32, 4C, 83, 2A, -65
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| 2090 | DATA | 91, 83, 22, 38, 83, 2A, 93, 83, -97 |
| 2100 | DATA | 22, 3A, 83, 3A, 99, 83, 32, 3C, -61 |
| 2110 | DATA | 83, CD, 46, 82, ED, 4B, 47, 83, 32 |
| 2120 | DATA | 3A, 4C, 83, A9, 32, 87, 83, 3A, 68 |
| 2130 | DATA | 73, 83, 8F, 32, 84, 83, 3A, 72, -22 |
| 2140 | DATA | 83, 8F, 32, 83, 83, 3A, 71, 83, 38 |
| 2150 | DATA | 8F, 32, 82, 83, 3A, 70, 83, 8F, -26 |
| 2160 | DATA | 32, 81, 83, 3A, 6F, 83, 8F, 32, -67 |
| 2170 | DATA | 80, 83, 3A, 6E, 83, 8F, 32, 7F, 144 |
| 2180 | DATA | 83, 2A, 33, 83, 22, 88, 83, 2A, 4 |
| 2190 | DATA | 35, 83, 22, 8A, 83, 21, 00, 00, 84 |
| 2200 | DATA | 22, 8C, 83, 3A, 37, 83, 32, 90, 203 |
| 2210 | DATA | 83, CD, 00, 82, 2A, 91, 83, 22, 210 |
| 2220 | DATA | 3D, 83, 2A, 93, 83, 22, 3F, 83, 146 |
| 2230 | DATA | 3A, 99, 83, 32, 41, 83, AF, C9, 106 |
| 2240 | DATA | 3A, 90, 83, 4F, 06, 05, 3A, 87, 110 |
| 2250 | DATA | 83, 32, 99, 83, DD, 21, 83, 83, -291 |
| 2260 | DATA | B9, 3E, 80, 37, 3F, 20, 0E, DD, -20 |
| 2270 | DATA | 8E, 09, DD, 77, 12, DD, 2B, DD, 146 |
| 2280 | DATA | 7E, 00, 10, F3, C9, DD, 9E, 09, -28 |
| 2290 | DATA | DD, 77, 12, DD, 2B, DD, 7E, 00, 153 |
| 2300 | DATA | 10, F3, D0, 21, 91, 83, 06, 05, 37 |
| 2310 | DATA | 7E, 2F, 77, 23, 10, FA, 3A, 99, 166 |
| 2320 | DATA | 83, 2F, 32, 99, 83, C9, 3A, 4B, 106 |
| 2330 | DATA | 83, DD, 21, 50, 83, 01, 00, 00, 7 |
| 2340 | DATA | 2A, 42, 83, 5F, CD, DB, 82, 09, -119 |
| 2350 | DATA | DD, 75, 01, DD, 74, 00, 3A, 4A, 16 |
| 2360 | DATA | 83, DD, 21, 57, 83, CD, A7, 82, 181 |
| 2370 | DATA | 3A, 49, 83, DD, 21, 5E, 83, CD, 240 |
| 2380 | DATA | A7, 82, 3A, 48, 83, DD, 21, 65, 135 |
| 2390 | DATA | 83, CD, A7, 82, 3E, 02, 06, 05, -24 |
| 2400 | DATA | DD, 21, 52, 83, DD, 2B, 16, 00, -339 |
| 2410 | DATA | DD, 86, 00, 30, 01, 14, DD, 86, -107 |
| 2420 | DATA | 08, 30, 01, 14, DD, 86, 10, 30, 4 |
| 2430 | DATA | 01, 14, DD, 86, 18, 30, 01, 14, -25 |
| 2440 | DATA | DD, 77, 20, 7A, 10, DE, C9, 2A, 35 |
| 2450 | DATA | 45, 83, 5F, CD, DB, 82, DD, 75, -21 |
| 2460 | DATA | 04, 4C, 2A, 44, 83, 5F, CD, DB, 76 |
| 2470 | DATA | 82, 09, dd, 75, 03, 4c, 2a, 43, -127 |
| 2480 | DATA | 83, 5F, CD, DB, 82, ED, 4A, DD, 232 |
| 2490 | DATA | 75, 02, 4C, 2A, 42, 83, 5F, CD, 26 |
| 2500 | DATA | DB, 82, ED, 4A, DD, 75, 01, DD, -136 |
| 2510 | DATA | 74, 00, C9, 2E, 00, 55, 29, 30, -179 |
| 2520 | DATA | 01, 19, 29, 30, 01, 19, 29, 30, 62 |
| 2530 | DATA | 01, 19, 29, 30, 01, 19, 29, 30, 62 |
| 2540 | DATA | 01, 19, 29, 30, 01, 19, 29, 30, 62 |
| 2550 | DATA | 01, 19, 29, D0, 19, C9, 06, 21, 394 |
| 2560 | DATA | 21, 4D, 83, AF, 77, 23, 10, FC, 240 |
| 2570 | DATA | C9, AF, 32, 42, 83, 21, 2E, 83, -23 |
| 2580 | DATA | 11, 38, 83, ED, A0, ED, A0, ED, 299 |
| 2590 | DATA | A0, ED, A0, ED, A0, 21, 33, 83, 107 |
| 2600 | DATA | 11, 3D, 83, ED, A0, ED, A0, ED, 304 |
| 2610 | DATA | A0, ED, A0, ED, A0, C9, 00, 00, 195 |
| 2620 | DATA | 00, FIM, 0 |