

]list

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0  GR
1  SC = 40
4  DIM C(15)
5  C(15) = 0:C(14) = 10:C(13) = 5:C(12) = 8:C(11) = 2:C(10) = 3:C(9) = 6:
    C(8) = 7:C(7) = 4:C(6) = 12:C(5) = 14:C(4) = 1:C(3) = 9:C(2) = 11:C(
    1) = 13
10 XL = - 1.5
20 XH = 0.5
30 YL = - 1.0
40 YH = 1.0
45 XS = (XH - XL) / SC
46 YS = (YH - YL) / SC
50  FOR XP = 0 TO 39
55  X0 = XL + (XP * XS)
60  FOR YP = 0 TO 39
65  Y0 = YH - (YP * YS)
100 I = 0
110 MI = 15
150 X = 0
160 Y = 0
200 X2 = X * X
210 Y2 = Y * Y
215 SX = X2 + Y2
220  IF SX > = 4.0 OR I > = MI THEN 500
230 XT = X2 - Y2 + X0
240 Y = 2 * X * Y + Y0
250 X = XT
260 I = I + 1
270 X2 = X * X
280 Y2 = Y * Y
285 SX = X2 + Y2
288  IF X2 > 1E15 OR Y2 > 1E15 THEN 300
290  GOTO 220
300  PRINT I:I = 15
500  IF I = 0 THEN CC = 15
501  IF I > 0 THEN CC = C(I)
505  COLOR= CC
510  PLOT XP,YP
550  NEXT YP
560  NEXT XP
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