

Сатурн и его кольца на экране монитора

Моделирование на языке
программирования QBASIC

«Чёрная дыра»

SCREEN 12

FOR i = 50 TO 1 STEP -1

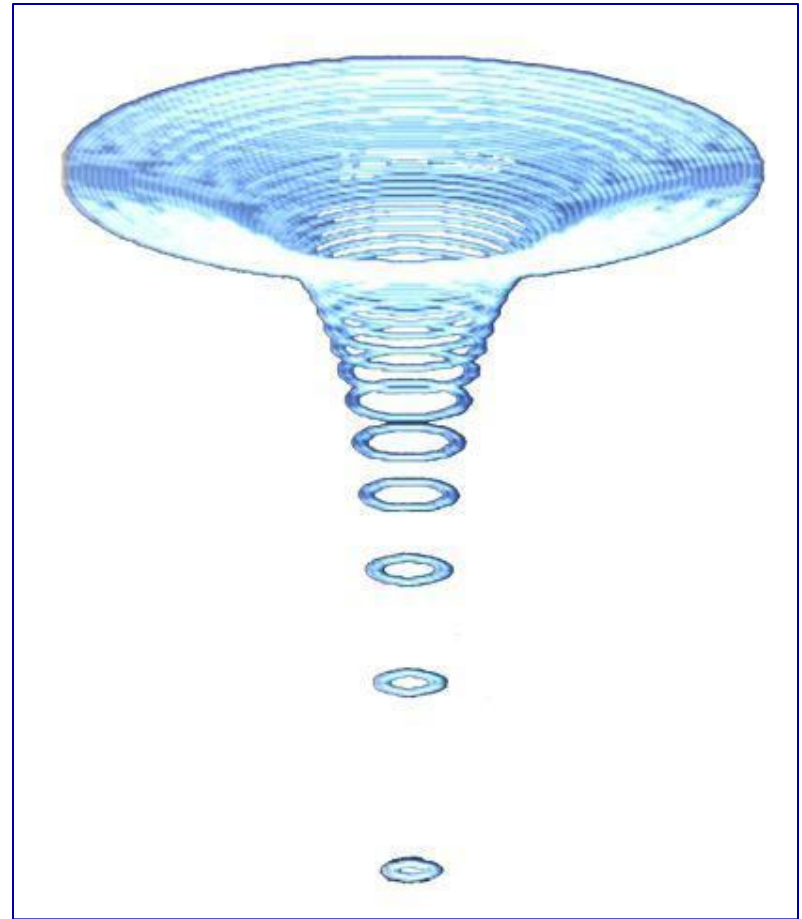
x = INT(300 / 2)

y = 50 + 900 / i

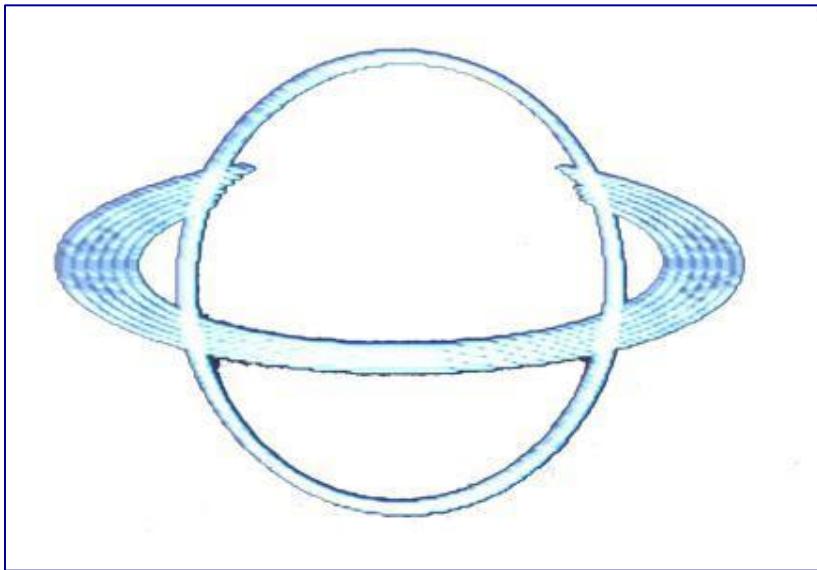
r = 3 * i

CIRCLE (x, y), r, , , , .3

NEXT i



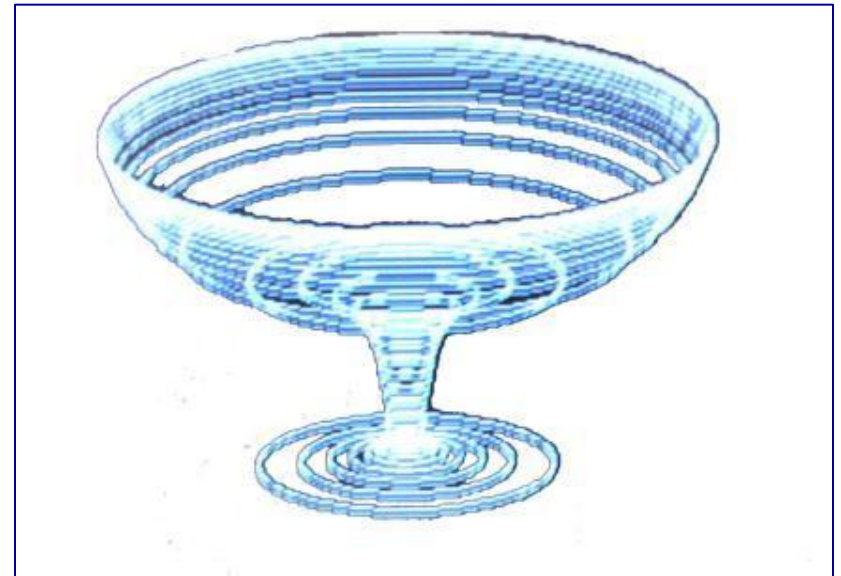
«Сатурн и его кольца»



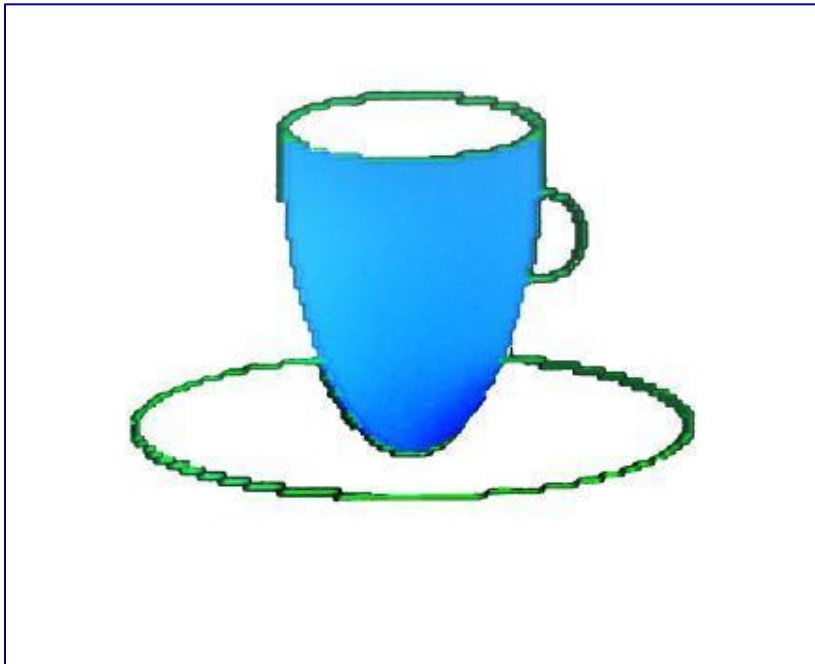
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SCREEN 12
x = INT(300 / 2)
y = INT(200 / 2)
FOR r = 79 TO 81
CIRCLE (x, y), r
NEXT r
k0 = .77
k2 = .77
FOR i = 1 TO 26 STEP 5
k0 = k0 - .02
k1 = k0 * 3.1415
k2 = k2 + .05
CIRCLE (x, y - 7), 100 + i, , k1, k2, .3
NEXT i
```

«Ваза»

```
SCREEN 12
FOR i = 15 TO 2 STEP -1
r = 120 * COS(3.1415 / i)
y = 80 * SIN(3.1415 / i)
CIRCLE (INT(300 / 2), 20 + y), r, , , , .3
NEXT i
y2 = y
FOR i = 10 TO 65 STEP 5
r = 20 / (i / 20)
CIRCLE (INT(300 / 2), y2 + i), r, , , , .3
NEXT i
y3 = y2 + 65
FOR i = 2 TO 10
r = 2 * EXP(i / 3)
CIRCLE (INT(300 / 2), y3 + i), r, , , , .3
NEXT i
```



«Чаша»



SCREEN 7

pi = 3.14

**CIRCLE (160, 40), 30, 2, , ,
.2**

**CIRCLE (160, 40), 60, 2,
pi, 2 * pi, 2**

**CIRCLE (160, 95), 65, 2, .6
* pi, .4 * pi, .2**

**CIRCLE (190, 60), 10, 2,
1.36 * pi, .49 * pi**

PAINT (160, 50), 1, 2

«Ваза 2»

SCREEN 7

pi = 3.14

CIRCLE (160, 45), 30, 5, , , .15

CIRCLE (130, 65), 20, 5, 1.5 *
pi, .5 * pi, 2

CIRCLE (190, 65), 20, 5, .5 * pi,
1.5 * pi, 2

CIRCLE (130, 95), 10, 5, .5 * pi,
1.5 * pi, 1.1

CIRCLE (190, 95), 10, 5, 1.5 *
pi, .5 * pi, 1.1

LINE (130, 105)-(190, 105), 5

PAINT (150, 80), 5, 5

