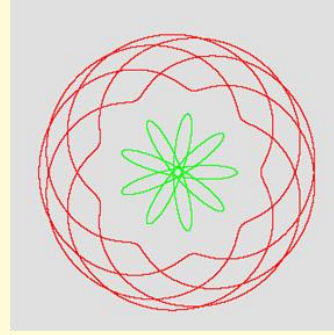
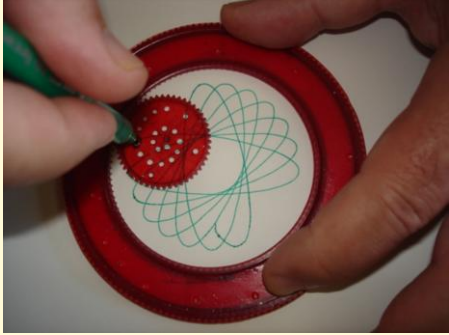


# MatεArt3

## curvas sobre curvas

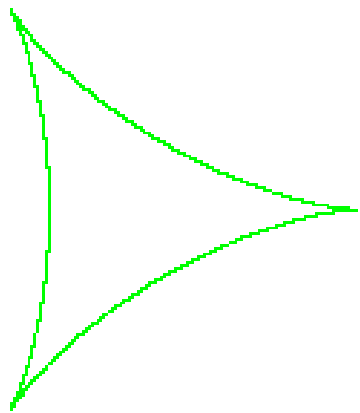


**n-hipocicloide(R,r)**    [hipotrocoide]

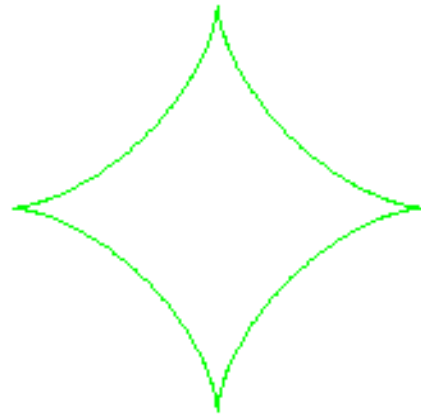
$$x = (R-r) \cdot \cos(t) + (r/n) \cdot \cos((R-r) \cdot t/r)$$
$$y = (R-r) \cdot \text{SENO}(t) - (r/n) \cdot \text{SENO}((R-r) \cdot t/r)$$

**n-epicicloide(R,r)**    [epitrocoide]

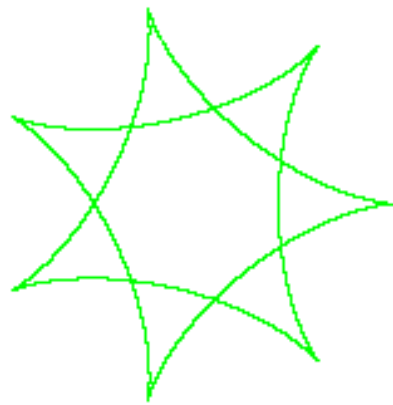
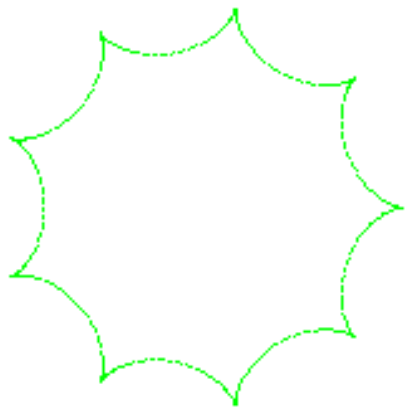
$$x = (R+r) \cdot \cos(t) - (r/n) \cdot \cos((R+r) \cdot t/r)$$
$$y = (R+r) \cdot \text{SENO}(t) - (r/n) \cdot \text{SENO}((R+r) \cdot t/r)$$

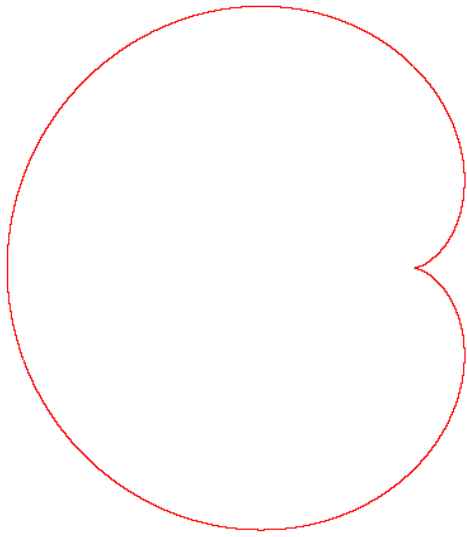


Hipocicloide de Steiner

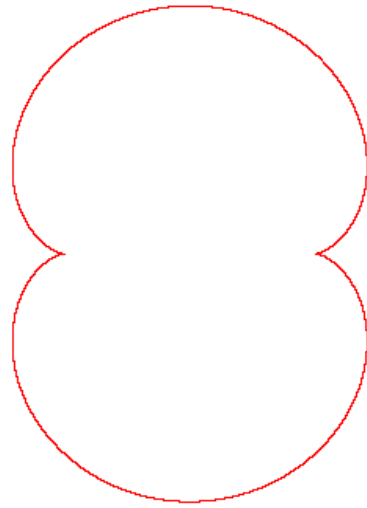


Astroide

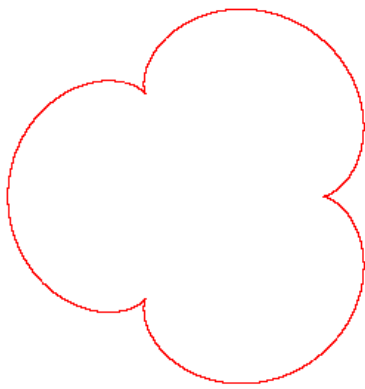




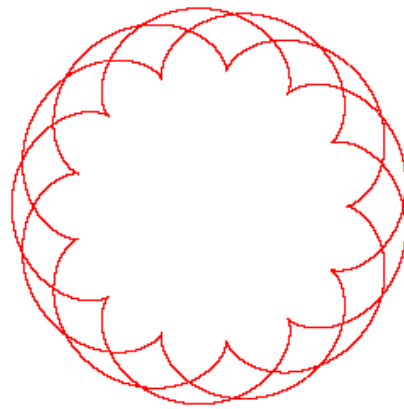
Cardioid



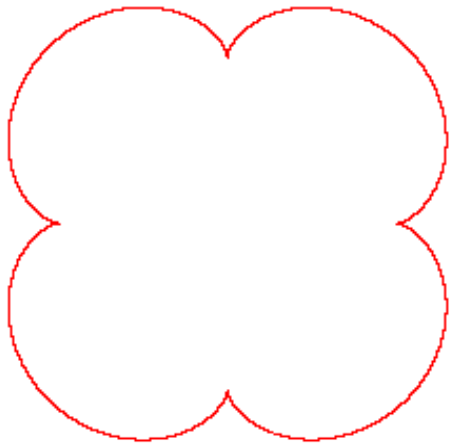
Nefroid de Huygens



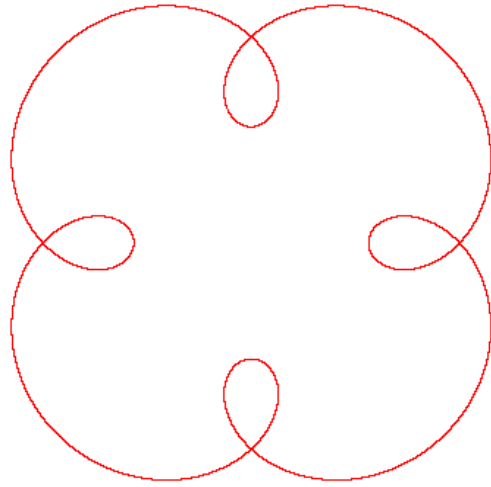
Trébol



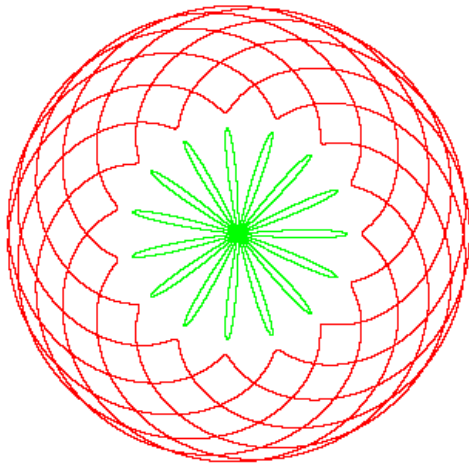
Corona



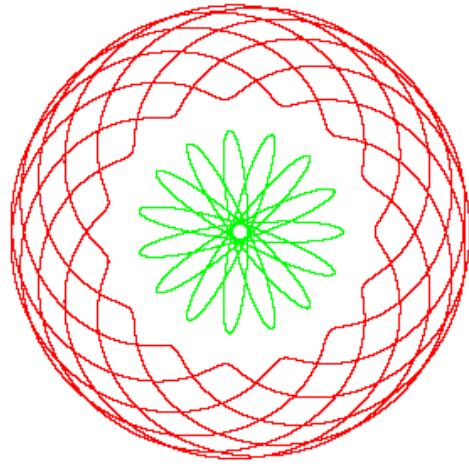
tetralóbulo



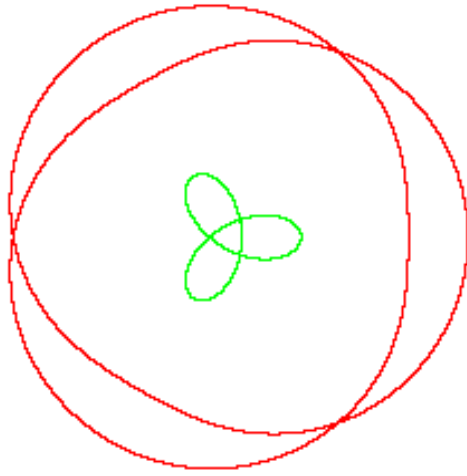
tetralóbulo arabesco



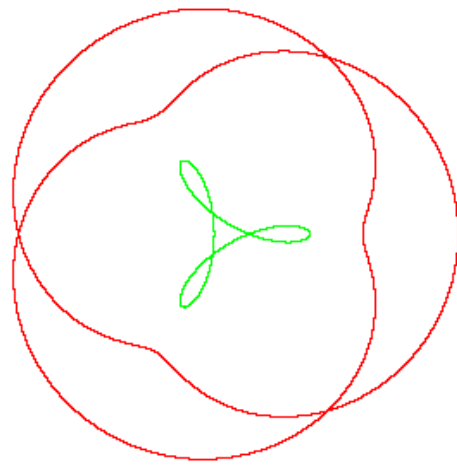
cierra



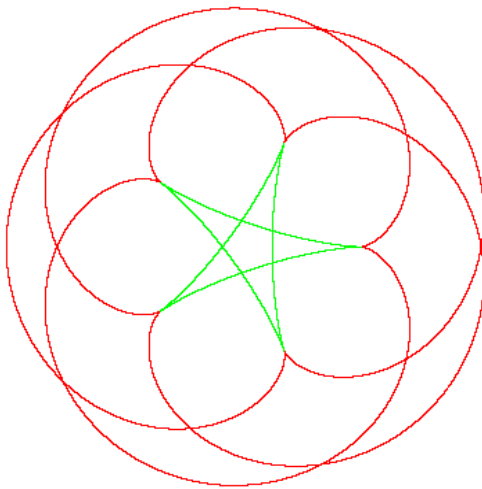
no cierra



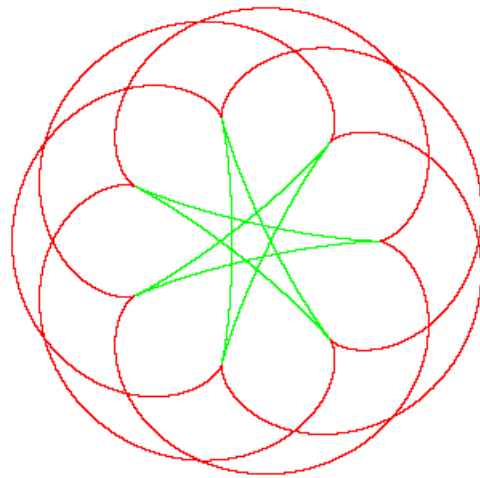
triángulo central convexo



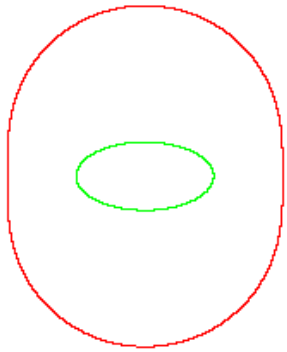
triángulo central cóncavo



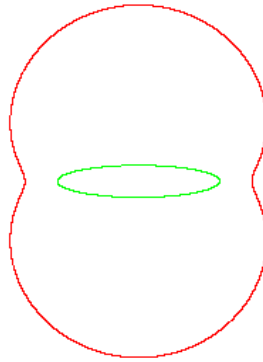
estrella de David



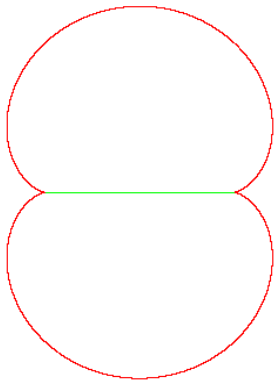
heptaestrella



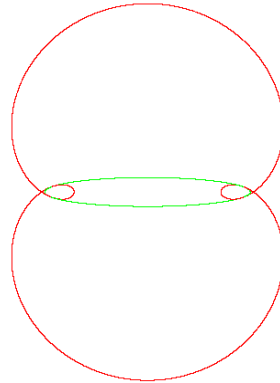
elipse 1



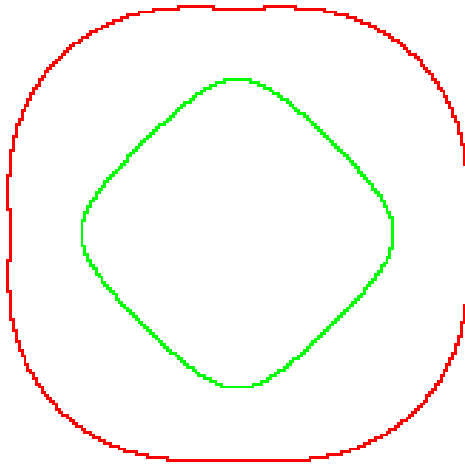
elipse 2



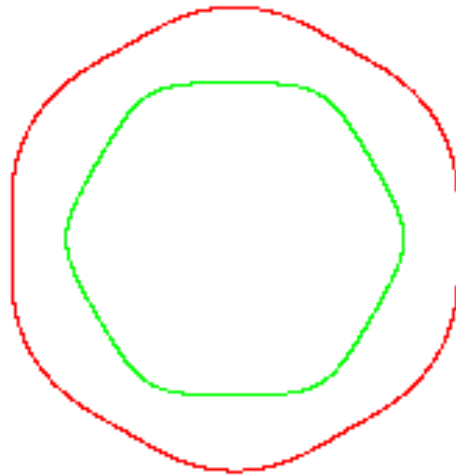
¿elipse?



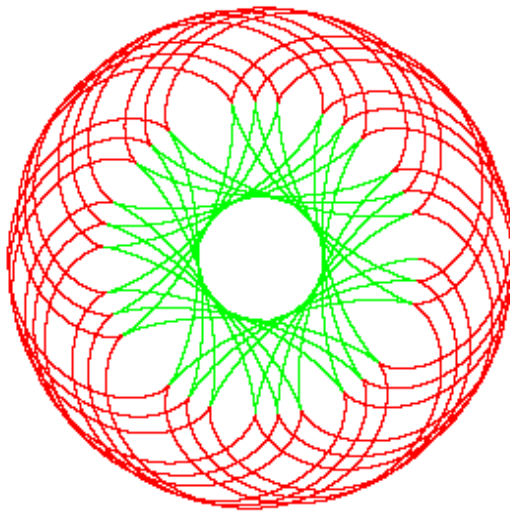
elipse  
engarzada



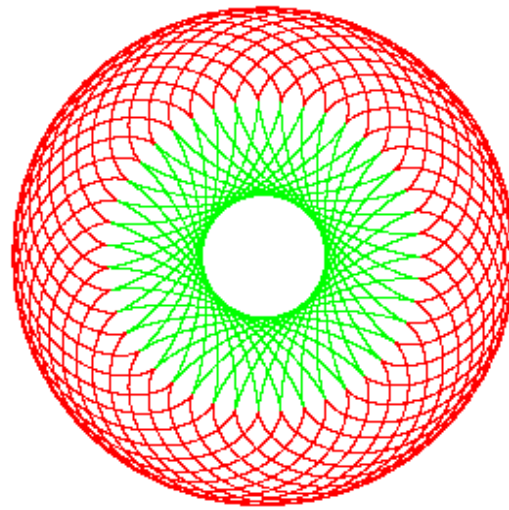
¿cuadrado?



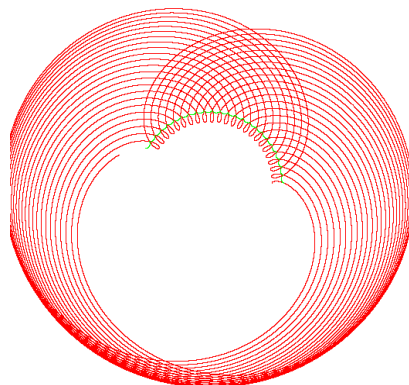
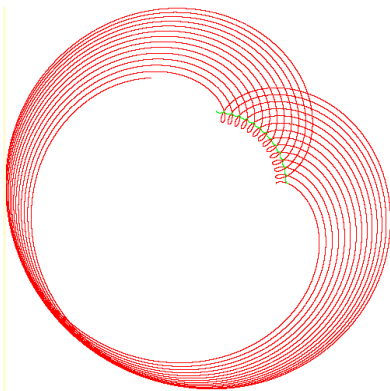
¿hexágono?



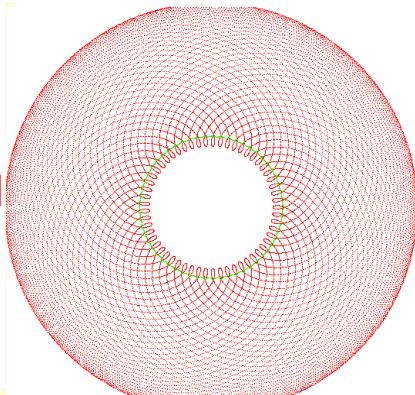
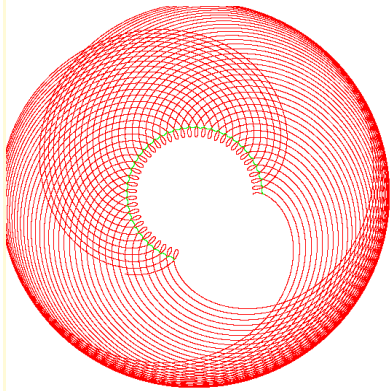
generando...



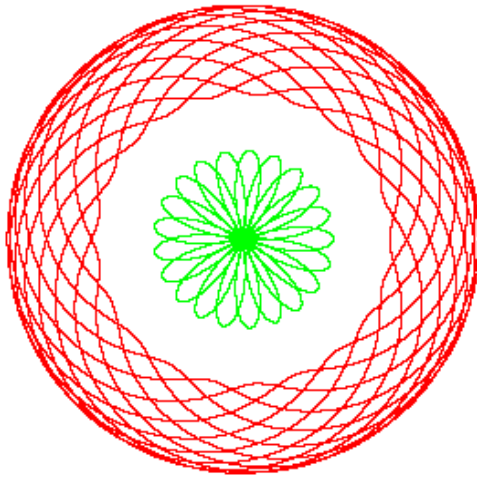
y fin



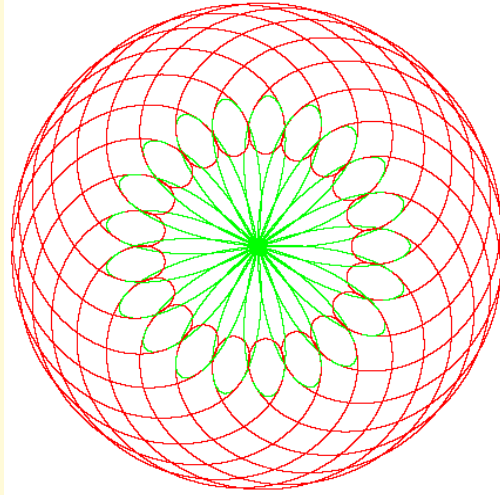
generando...



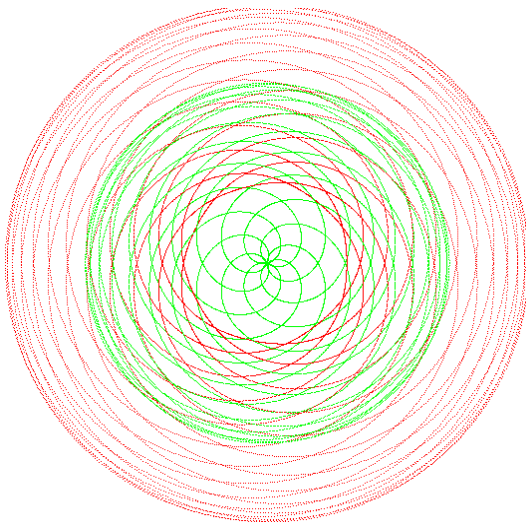
generando...



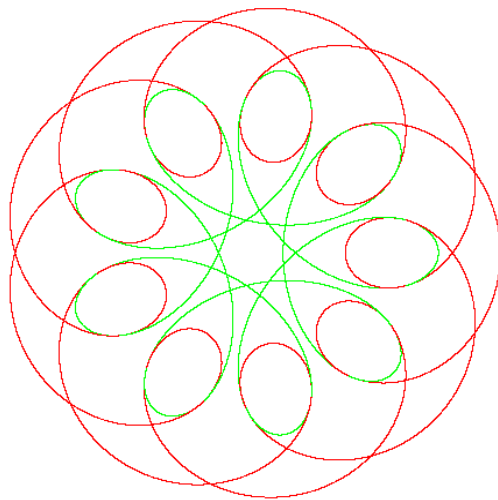
rosa de 21 pétalos



¿es posible?

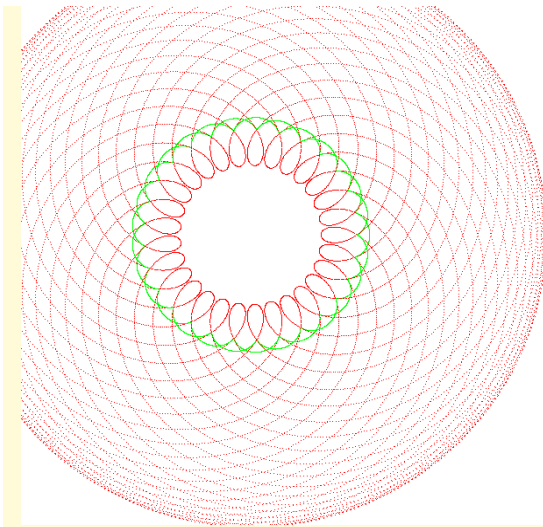


qué locura 1

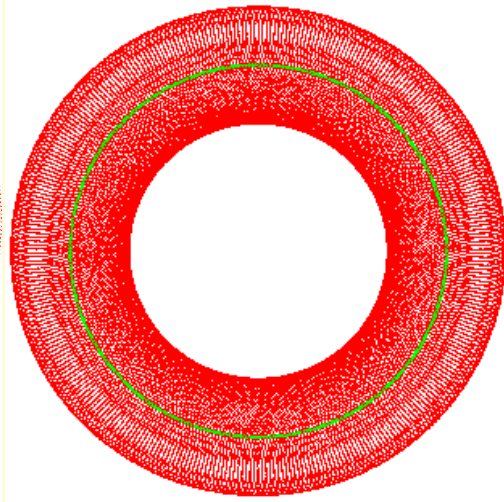


qué locura 2

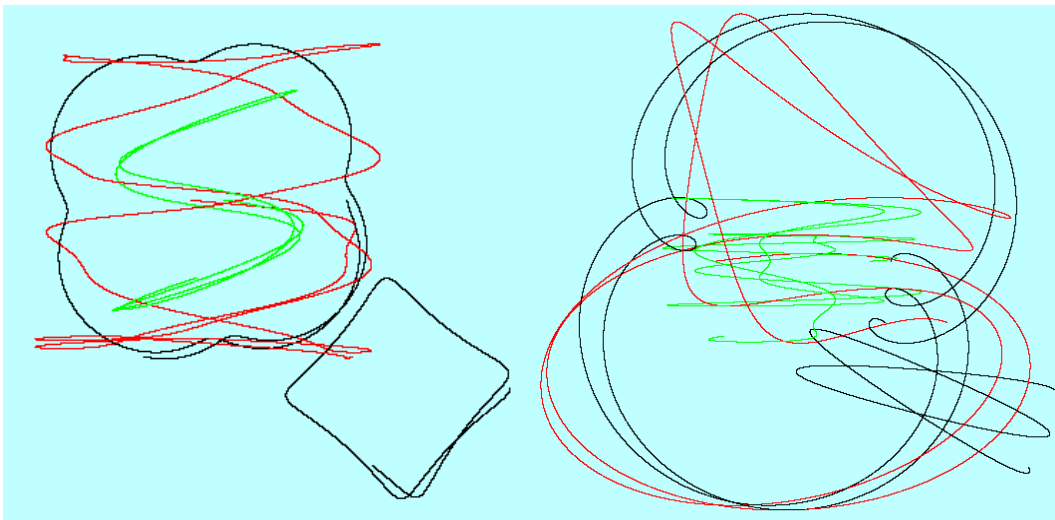




qué locura 3



qué locura 4



caos1

caos 2