

Parametric equations

Lisajous curves

Parametric equations are a group of functions of one or more independent variables. These variables are called parameters, in our case variable t is parameter.

Lisajous curves is a family of curves defined with trigonometric expressions given below.

$$\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} c \cdot \sin\left(\left(\frac{a}{b}\right) \cdot t\right) \\ d \cdot \sin(t) \end{bmatrix}$$

Here is one example of Lisajous curve

```
a1 := curve2d_param(4 * sin(4/3 t), 3 * sin(t), -10, 10, 1000)
```

