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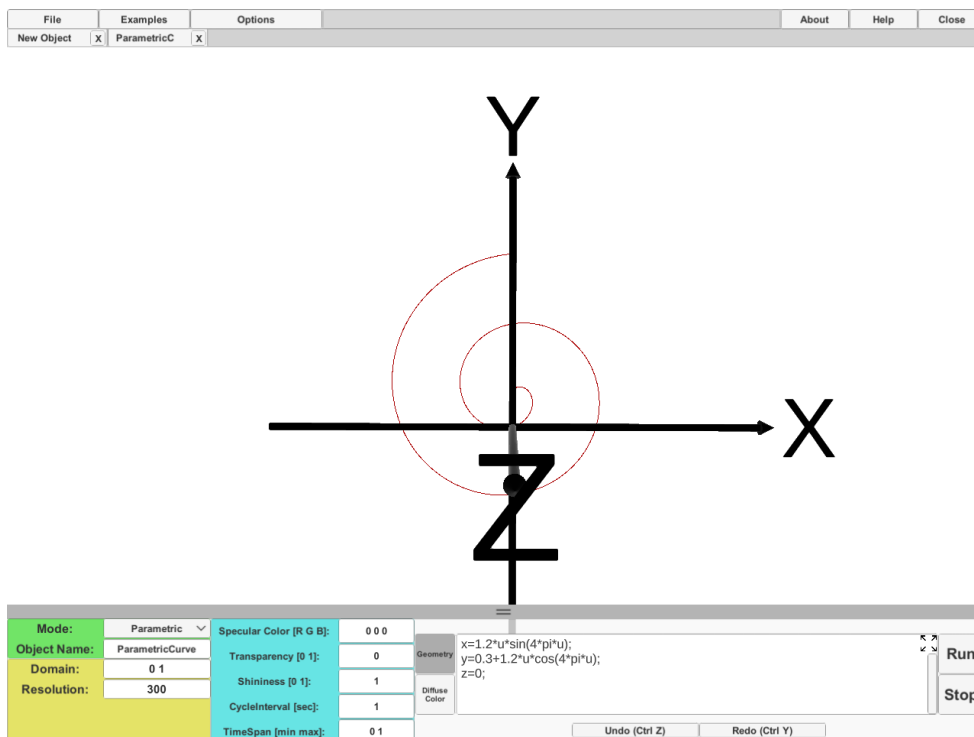
Q1. $x = 1 + (4-1)u$
 $y = 2 + (3-2)u$
 $u \in [0, \infty)$

Q2. $\frac{x}{-2} + \frac{y}{3} = 1$

$\Rightarrow -3x + 2y = 6$

$\Rightarrow -3x + 2y - 6 = 0$

Q3. $x = 1.2u \cdot \sin(4\pi u)$
 $y = 0.3 + 1.2u \cdot \cos(4\pi u)$
 $u \in [0, 1]$



Q4. If we represent it in polar coordinate
We can obtain that $R=0.75$

As for triangle function

$$T = \frac{\pi}{10}, \quad w = \frac{2\pi}{T} = 20, \quad A = 0.25, \quad b = 0$$

$$\Rightarrow r = A \cdot \sin(w\alpha + b) + R = 0.25 \sin(20\alpha) + 0.75 \quad \alpha \in [0, \pi]$$

$$\text{since } \begin{cases} x = r \cos(\alpha) \\ y = r \sin(\alpha) \end{cases}$$

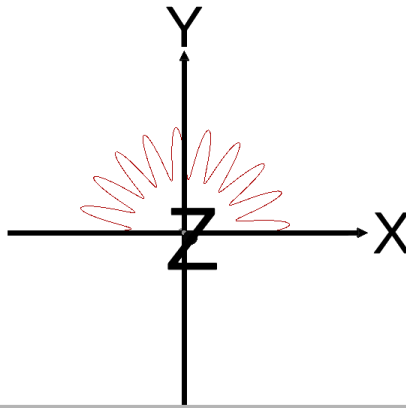
use u to represent α , then $\alpha = \pi u \quad u \in [0, 1]$

$$\therefore x = (0.25 \sin(20\pi u) + 0.75) \cos(\pi u)$$

$$y = (0.25 \sin(20\pi u) + 0.75) \sin(\pi u)$$

$$u \in [0, 1]$$

File	Examples	Options	About	Help	Close
New Object	x	ParametricC	x		



Mode:	Parametric	Specular Color [R G B]:	0 0 0	Geometry	x=(0.25*sin(20*pi*u)+0.75)*cos(pi*u); y=(0.25*sin(20*pi*u)+0.75)*sin(pi*u); z=0;	Run
Object Name:	ParametricCurve	Transparency [0 1]:	0	Diffuse Color		Stop
Domain:	0 1	Shininess [0 1]:	1			
Resolution:	300	CycleInterval [sec]:	1			
		TimeSpan [min max]:	0 1			