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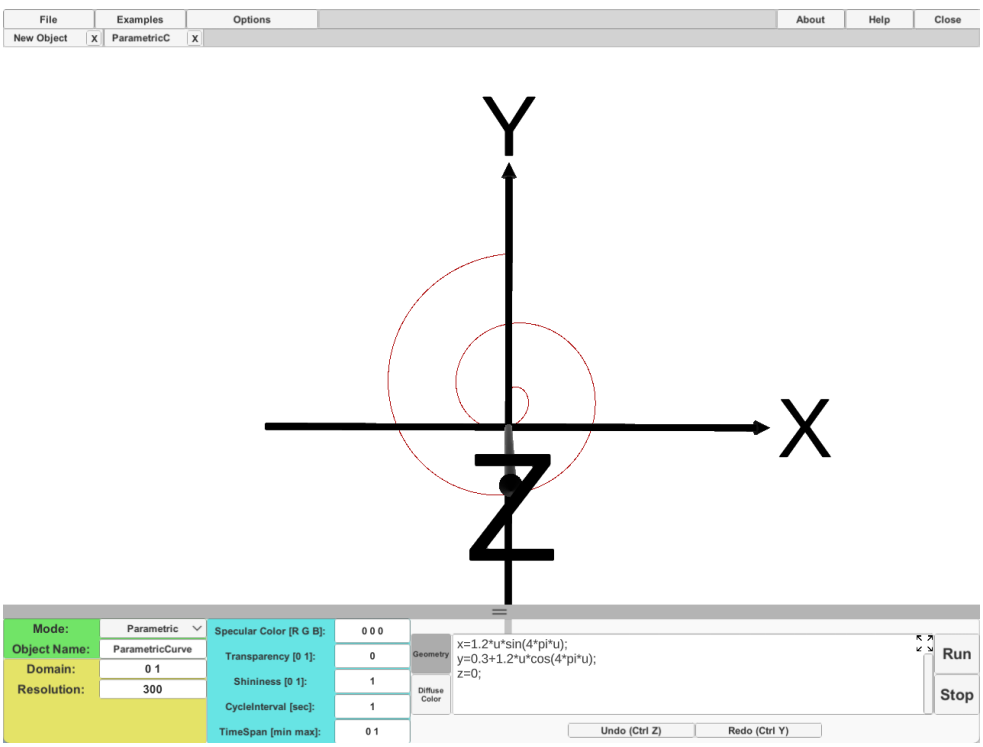
Q1. $x = 1+(4-1)u$
$y = 2+(3-2)u$
$u \in [0, \infty)$

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

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

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



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

As for triangle function
$T = \frac{\pi}{10}$, $w = \frac{2\pi}{T} = 20$, $A = 0.25$, $b = 0$

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

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

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

$\therefore$ $x = (0.25\sin(20\pi u) + 0.75)\cos(\pi u)$
$y = (0.25\sin(20\pi u) + 0.75)\sin(\pi u)$
$u \in [0, 1]$