$x = (R+r)\cos\frac{rt}{R} - c\cos\frac{(R+r)t}{R}$, $y = (R+r)\sin\frac{rt}{R} - c\sin\frac{(R+r)t}{R}$, $t \in R$.

$$x = (R+r)\cos\varphi - c\cos\frac{(R+r)\varphi}{r},\ y = (R+r)\sin\varphi - c\sin\frac{(R+r)\varphi}{r},\ \varphi \in R.$$

$x = (1+e)r\cos\frac{t}{e} - 4r\cos\frac{(1+e)t}{e}$
$y = (1+e)r\sin\frac{t}{e} - 4r\sin\frac{(1+e)t}{e}$
$t \in \langle 0\,;\,16.8533\pi\rangle$

$$R = e\,r,\ c = 4r$$

$x = (1+e)r\cos\varphi - 4r\cos(1+e)\varphi$
$y = (1+e)r\sin\varphi - 4r\sin(1+e)\varphi$
$\varphi \in \langle 0\,;\,6.2\pi\rangle$