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

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

$x = (1+\pi)r\cos\frac{t}{\pi} - 2r\cos\frac{(1+\pi)t}{\pi}$

$y = (1+\pi)r\sin\frac{t}{\pi} - 2r\sin\frac{(1+\pi)t}{\pi}$

$t \in \langle 0\,;\, 19.4779\pi\rangle$

$R = \pi r,\ c = 2r$

$x = (1+\pi)r\cos\varphi - 2r\cos(1+\pi)\varphi$

$y = (1+\pi)r\sin\varphi - 2r\sin(1+\pi)\varphi$

$\varphi \in \langle 0\,;\, 6.2\pi\rangle$