

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

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

$$x = 4r \cos \frac{t}{3} - 4r \cos \frac{4t}{3}, y = 4r \sin \frac{t}{3} - 4r \sin \frac{4t}{3}$$

$t \in (0; 6\pi)$

$$x = 4r \cos \varphi - 4r \cos 4\varphi, y = 4r \sin \varphi - 4r \sin 4\varphi$$

$\varphi \in (0; 2\pi)$

$$R = 3r, c = 4r$$