

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

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

$$x = (1+\sqrt{5})r \cos \frac{t}{\sqrt{5}} - 4r \cos \frac{(1+\sqrt{5})t}{\sqrt{5}}$$

$$y = (1+\sqrt{5})r \sin \frac{t}{\sqrt{5}} - 4r \sin \frac{(1+\sqrt{5})t}{\sqrt{5}}$$

$t \in \langle 0; 13.8636\pi \rangle$

$$R = \sqrt{5}r, c = 4r$$

$$x = (1+\sqrt{5})r \cos \varphi - 4r \cos (1+\sqrt{5})\varphi$$

$$y = (1+\sqrt{5})r \sin \varphi - 4r \sin (1+\sqrt{5})\varphi$$

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