

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

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

$$x = (1+\sqrt{11})r \cos \frac{t}{\sqrt{11}} - \frac{r}{4} \cos \frac{(1+\sqrt{11})t}{\sqrt{11}}$$

$$y = (1+\sqrt{11})r \sin \frac{t}{\sqrt{11}} - \frac{r}{4} \sin \frac{(1+\sqrt{11})t}{\sqrt{11}}$$

$t \in \langle 0; 20.5631\pi \rangle$

$$R = \sqrt{11}r, c = \frac{r}{4}$$

$$x = (1+\sqrt{11})r \cos \varphi - \frac{r}{4} \cos (1+\sqrt{11})\varphi$$

$$y = (1+\sqrt{11})r \sin \varphi - \frac{r}{4} \sin (1+\sqrt{11})\varphi$$

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