

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

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

$$x = (\sqrt{11}-1)r \cos \frac{t}{\sqrt{11}} + \frac{r}{2} \cos \frac{(\sqrt{11}-1)t}{\sqrt{11}}$$

$$y = (\sqrt{11}-1)r \sin \frac{t}{\sqrt{11}} - \frac{r}{2} \sin \frac{(\sqrt{11}-1)t}{\sqrt{11}}$$

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

$$R = \sqrt{11}r, \quad c = \frac{r}{2}$$

$$x = (\sqrt{11}-1)r \cos \varphi + \frac{r}{2} \cos (\sqrt{11}-1)\varphi$$

$$y = (\sqrt{11}-1)r \sin \varphi - \frac{r}{2} \sin (\sqrt{11}-1)\varphi$$

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