

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

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

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

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

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

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

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

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

$$\varphi \in \langle 0; 8.7681\pi \rangle$$