

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

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

$$x = (\sqrt{7}-1)r \cos \frac{t}{\sqrt{7}} + 3r \cos \frac{(\sqrt{7}-1)t}{\sqrt{7}}$$

$$y = (\sqrt{7}-1)r \sin \frac{t}{\sqrt{7}} - 3r \sin \frac{(\sqrt{7}-1)t}{\sqrt{7}}$$

$$t \in \langle 0; 16.4037\pi \rangle$$

$$R = \sqrt{7}r, c = 3r$$

$$x = (\sqrt{7}-1)r \cos \varphi + 3r \cos (\sqrt{7}-1)\varphi$$

$$y = (\sqrt{7}-1)r \sin \varphi - 3r \sin (\sqrt{7}-1)\varphi$$

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