

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

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

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

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

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

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

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

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

$$\varphi \in \langle 0; 16.8533\pi \rangle$$