

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

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

$$x = (1+e)r \cos \frac{t}{e} - \frac{3r}{2} \cos \frac{(1+e)t}{e}$$

$$y = (1+e)r \sin \frac{t}{e} - \frac{3r}{2} \sin \frac{(1+e)t}{e}$$

$$t \in (0; 16.8533\pi)$$

$$R = er, c = \frac{3r}{2}$$

$$x = (1+e)r \cos \varphi - \frac{3r}{2} \cos (1+e)\varphi$$

$$y = (1+e)r \sin \varphi - \frac{3r}{2} \sin (1+e)\varphi$$

$$\varphi \in (0; 6.2\pi)$$