

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

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

$$x = -\frac{2r}{5} \cos \frac{5t}{3} + \frac{r}{2} \cos \frac{2t}{3}, y = -\frac{2r}{5} \sin \frac{5t}{3} + \frac{r}{2} \sin \frac{2t}{3} \quad x = -\frac{2r}{5} \cos \varphi + \frac{r}{2} \cos \frac{2\varphi}{5}, y = -\frac{2r}{5} \sin \varphi + \frac{r}{2} \sin \frac{2\varphi}{5}$$

$t \in (0; 6\pi)$ $\varphi \in (0; 10\pi)$

$$R = \frac{3r}{5}, c = \frac{r}{2}$$