

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

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

$$x = -\frac{7r}{8} \cos 8t + 3r \cos 7t, y = -\frac{7r}{8} \sin 8t + 3r \sin 7t \quad x = -\frac{7r}{8} \cos \varphi + 3r \cos \frac{7\varphi}{8}, y = -\frac{7r}{8} \sin \varphi + 3r \sin \frac{7\varphi}{8}$$

$t \in (0; 2\pi)$ $\varphi \in (0; 16\pi)$

$$R = \frac{r}{8}, c = 3r$$