

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

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

$$x = -\frac{4r}{5} \cos 5t + 5r \cos 4t, y = -\frac{4r}{5} \sin 5t + 5r \sin 4t \quad x = -\frac{4r}{5} \cos \varphi + 5r \cos \frac{4\varphi}{5}, y = -\frac{4r}{5} \sin \varphi + 5r \sin \frac{4\varphi}{5}$$

$t \in (0; 2\pi)$ $\varphi \in (0; 10\pi)$

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