

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

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

$$x = \frac{2r}{5} \cos \frac{5t}{7} + 3r \cos \frac{2t}{7}, y = \frac{2r}{5} \sin \frac{5t}{7} - 3r \sin \frac{2t}{7}$$

$$t \in \langle 0; 14\pi \rangle$$

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

$$\varphi \in \langle 0; 10\pi \rangle$$

$$R = \frac{7r}{5}, c = 3r$$