

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

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

$$x = \frac{5r}{2} \cos \frac{2t}{3} - 4r \cos \frac{5t}{3}, y = \frac{5r}{2} \sin \frac{2t}{3} - 4r \sin \frac{5t}{3}$$

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

$$x = \frac{5r}{2} \cos \varphi - 4r \cos \frac{5\varphi}{2}, y = \frac{5r}{2} \sin \varphi - 4r \sin \frac{5\varphi}{2}$$

$$\varphi \in (0; 4\pi)$$

$$R = \frac{3r}{2}, c = 4r$$