

Epicykloida – predĺžená

$c > r > 0, R > 0$

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

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

$$x = 8r \cos \frac{t}{7} - 4r \cos \frac{8t}{7}, \quad y = 8r \sin \frac{t}{7} - 4r \sin \frac{8t}{7}$$
$$t \in \langle 0; 14\pi \rangle$$

$$x = 8r \cos \varphi - 4r \cos 8\varphi, \quad y = 8r \sin \varphi - 4r \sin 8\varphi$$
$$\varphi \in \langle 0; 2\pi \rangle$$

$$R = 7r, c = 4r$$