

Hypocykloida – obyčajná

$c=r, R>r>0$

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

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

$$x = 7r \cos \frac{t}{8} + r \cos \frac{7t}{8}, \quad y = 7r \sin \frac{t}{8} - r \sin \frac{7t}{8}$$
$$t \in \langle 0; 16\pi \rangle$$

$$x = 7r \cos \varphi + r \cos 7\varphi, \quad y = 7r \sin \varphi - r \sin 7\varphi$$
$$\varphi \in \langle 0; 2\pi \rangle$$

$$R = 8r, c = r$$