

Epicykloida – skrátená

$r > c \geq 0, R > 0$

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

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

$$x = 9r \cos \frac{t}{8} - \frac{3r}{4} \cos \frac{9t}{8}, \quad y = 9r \sin \frac{t}{8} - \frac{3r}{4} \sin \frac{9t}{8}$$
$$t \in \langle 0; 16\pi \rangle$$

$$x = 9r \cos \varphi - \frac{3r}{4} \cos 9\varphi, \quad y = 9r \sin \varphi - \frac{3r}{4} \sin 9\varphi$$
$$\varphi \in \langle 0; 2\pi \rangle$$

$$R = 8r, \quad c = \frac{3r}{4}$$