

Epicykloida – skrátená

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

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

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

$$x = \frac{14r}{9} \cos \frac{9t}{5}, \quad y = \frac{14r}{9} \sin \frac{9t}{5}$$
$$t \in \langle 0; 10\pi \rangle$$

$$x = \frac{14r}{9} \cos \varphi, \quad y = \frac{14r}{9} \sin \varphi$$
$$\varphi \in \langle 0; 18\pi \rangle$$

$$R = \frac{5r}{9}, \quad c = 0$$