

Epicykloida – obyčajná

$c=r$, $R>0$, $r>0$

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

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

$$x = \frac{9r}{5} \cos \frac{5t}{4} - r \cos \frac{9t}{4}, \quad y = \frac{9r}{5} \sin \frac{5t}{4} - r \sin \frac{9t}{4}$$
$$t \in \langle 0; 8\pi \rangle$$

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

$$R = \frac{4r}{5}, \quad c = r$$