

Epicykloida – obyčajná

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

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

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

$$x = \frac{16r}{9} \cos \frac{9t}{7} - r \cos \frac{16t}{7}, \quad y = \frac{16r}{9} \sin \frac{9t}{7} - r \sin \frac{16t}{7} \\ t \in \langle 0; 14\pi \rangle$$

$$x = \frac{16r}{9} \cos \varphi - r \cos \frac{16\varphi}{9}, \quad y = \frac{16r}{9} \sin \varphi - r \sin \frac{16\varphi}{9} \\ \varphi \in \langle 0; 18\pi \rangle$$

$$R = \frac{7r}{9}, \quad c = r$$