

Pericykloida – predĺžená

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

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

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

$$x = \frac{(1-e)r}{e} \cos e t + \frac{r}{4} \cos (e-1)t$$

$$y = \frac{(1-e)r}{e} \sin e t + \frac{r}{4} \sin (e-1)t$$

$$t \in \langle 0; 6.2\pi \rangle$$

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

$$x = \frac{(1-e)r}{e} \cos \varphi + \frac{r}{4} \cos \frac{(e-1)\varphi}{e}$$

$$y = \frac{(1-e)r}{e} \sin \varphi + \frac{r}{4} \sin \frac{(e-1)\varphi}{e}$$

$$\varphi \in \langle 0; 16.8533\pi \rangle$$