

Pericykloida – skrátená

$c > r > R > 0$

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

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

$$x = -\frac{8r}{9} \cos 9t + \frac{3r}{2} \cos 8t, \quad y = -\frac{8r}{9} \sin 9t + \frac{3r}{2} \sin 8t \quad x = -\frac{8r}{9} \cos \varphi + \frac{3r}{2} \cos \frac{8\varphi}{9}, \quad y = -\frac{8r}{9} \sin \varphi + \frac{3r}{2} \sin \frac{8\varphi}{9}$$

$t \in \langle 0; 2\pi \rangle$ $\varphi \in \langle 0; 18\pi \rangle$

$$R = \frac{r}{9}, \quad c = \frac{3r}{2}$$