

# Pericykloida – skrátená

$c > r > R > 0$

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

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

$$x = -\frac{6r}{7} \cos 7t + 3r \cos 6t, \quad y = -\frac{6r}{7} \sin 7t + 3r \sin 6t \quad x = -\frac{6r}{7} \cos \varphi + 3r \cos \frac{6\varphi}{7}, \quad y = -\frac{6r}{7} \sin \varphi + 3r \sin \frac{6\varphi}{7}$$
$$t \in \langle 0; 2\pi \rangle \quad \varphi \in \langle 0; 14\pi \rangle$$

$$R = \frac{r}{7}, \quad c = 3r$$