

# Pericykloida – skrátená

$c > r > R > 0$

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

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

$$x = -\frac{r}{6} \cos \frac{6t}{5} + 4r \cos \frac{t}{5}, \quad y = -\frac{r}{6} \sin \frac{6t}{5} + 4r \sin \frac{t}{5} \quad x = -\frac{r}{6} \cos \varphi + 4r \cos \frac{\varphi}{6}, \quad y = -\frac{r}{6} \sin \varphi + 4r \sin \frac{\varphi}{6}$$

$t \in \langle 0; 10\pi \rangle$   $\varphi \in \langle 0; 12\pi \rangle$

$$R = \frac{5r}{6}, \quad c = 4r$$