

# Epicykloida – predĺžená

$c > r > 0, R > 0$

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

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

$$x = \frac{13r}{6} \cos \frac{6t}{7} - 4r \cos \frac{13t}{7}, \quad y = \frac{13r}{6} \sin \frac{6t}{7} - 4r \sin \frac{13t}{7} \quad x = \frac{13r}{6} \cos \varphi - 4r \cos \frac{13\varphi}{6}, \quad y = \frac{13r}{6} \sin \varphi - 4r \sin \frac{13\varphi}{6}$$
$$t \in \langle 0; 14\pi \rangle \quad \varphi \in \langle 0; 12\pi \rangle$$

$$R = \frac{7r}{6}, \quad c = 4r$$