Hypocykloida – predĺžená

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

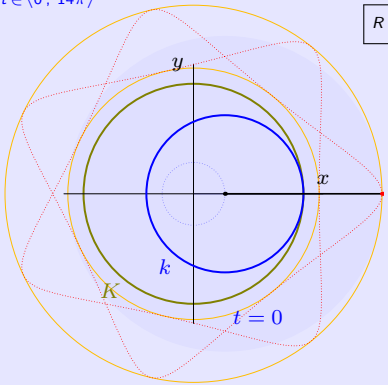
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R},\ y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R},\ t \in R.$

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

$x = \frac{2r}{5}\cos\frac{5t}{7} + 2r\cos\frac{2t}{7},\ y = \frac{2r}{5}\sin\frac{5t}{7} - 2r\sin\frac{2t}{7}$

$t \in \langle 0\,;\ 14\pi\rangle$

$R = \frac{7r}{5},\ c = 2r$



$x = \frac{2r}{5}\cos\varphi + 2r\cos\frac{2\varphi}{5},\ y = \frac{2r}{5}\sin\varphi - 2r\sin\frac{2\varphi}{5}$

$\varphi \in \langle 0\,;\ 10\pi\rangle$