Hypocykloida – predĺžená

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

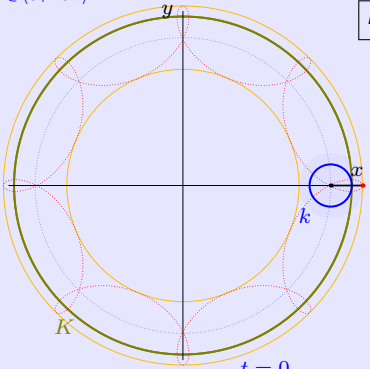
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R},\ y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R},\ t \in R.$

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

$x = 7r\cos\frac{t}{8} + \frac{3r}{2}\cos\frac{7t}{8},\ y = 7r\sin\frac{t}{8} - \frac{3r}{2}\sin\frac{7t}{8}$

$t \in \langle 0\,;\ 16\pi\rangle$

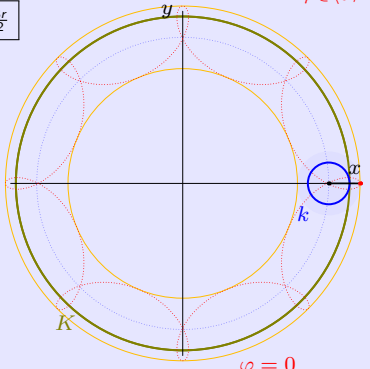
$R = 8r,\ c = \frac{3r}{2}$



$t = 0$

$x = 7r\cos\varphi + \frac{3r}{2}\cos 7\varphi,\ y = 7r\sin\varphi - \frac{3r}{2}\sin 7\varphi$

$\varphi \in \langle 0\,;\ 2\pi\rangle$



$\varphi = 0$