Hypocykloida – skrátená

$R > r > c > 0$

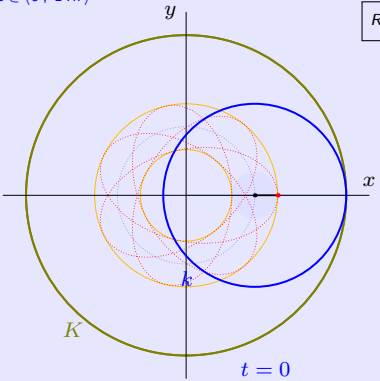
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R},\ y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R},\ t \in R.$

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

$x = \frac{3r}{4}\cos\frac{4t}{7} + \frac{r}{4}\cos\frac{3t}{7},\ y = \frac{3r}{4}\sin\frac{4t}{7} - \frac{r}{4}\sin\frac{3t}{7}$

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

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



$x = \frac{3r}{4}\cos\varphi + \frac{r}{4}\cos\frac{3\varphi}{4},\ y = \frac{3r}{4}\sin\varphi - \frac{r}{4}\sin\frac{3\varphi}{4}$

$\varphi \in \langle 0\,;\ 8\pi\rangle$