Hypocykloida – skrátená

$R > r > c > 0$

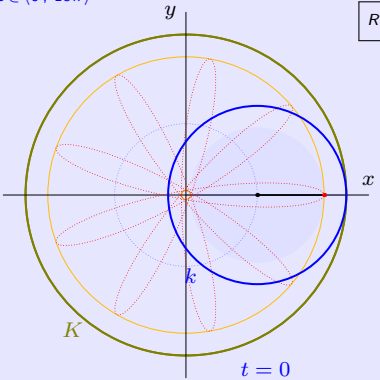
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R},\ y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R},\ t \in R.$

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

$x = \frac{4r}{5}\cos\frac{5t}{9} + \frac{3r}{4}\cos\frac{4t}{9},\ y = \frac{4r}{5}\sin\frac{5t}{9} - \frac{3r}{4}\sin\frac{4t}{9}$

$t \in \langle 0\,;\ 18\pi \rangle$

$R = \frac{9r}{5},\ c = \frac{3r}{4}$



$x = \frac{4r}{5}\cos\varphi + \frac{3r}{4}\cos\frac{4\varphi}{5},\ y = \frac{4r}{5}\sin\varphi - \frac{3r}{4}\sin\frac{4\varphi}{5}$

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