Hypocykloida – predĺžená

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

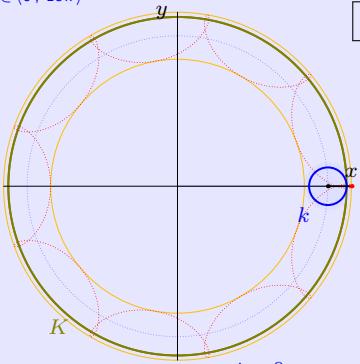
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R},\ y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R},\ t \in R.$

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

$x = 8r\cos\frac{t}{9} + \frac{5r}{4}\cos\frac{8t}{9},\ y = 8r\sin\frac{t}{9} - \frac{5r}{4}\sin\frac{8t}{9}$

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

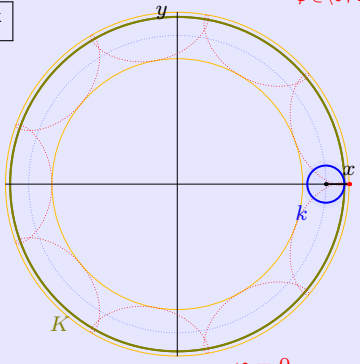
$R = 9r,\ c = \frac{5r}{4}$



$t = 0$

$x = 8r\cos\varphi + \frac{5r}{4}\cos 8\varphi,\ y = 8r\sin\varphi - \frac{5r}{4}\sin 8\varphi$

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



$\varphi = 0$