Epicykloida – predĺžená

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

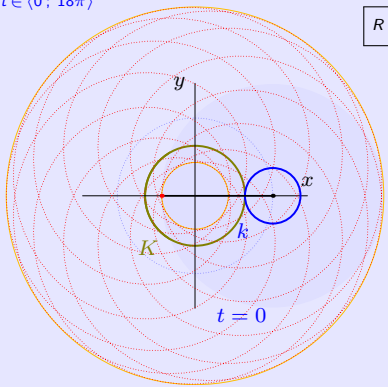
$x = (R+r)\cos\frac{rt}{R} - c\cos\frac{(R+r)t}{R},\ y = (R+r)\sin\frac{rt}{R} - c\sin\frac{(R+r)t}{R},\ t \in R.$

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

$x = \frac{14r}{5}\cos\frac{5t}{9} - 4r\cos\frac{14t}{9},\ y = \frac{14r}{5}\sin\frac{5t}{9} - 4r\sin\frac{14t}{9}$

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

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



$x = \frac{14r}{5}\cos\varphi - 4r\cos\frac{14\varphi}{5},\ y = \frac{14r}{5}\sin\varphi - 4r\sin\frac{14\varphi}{5}$

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