Epicykloida – predĺžená

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

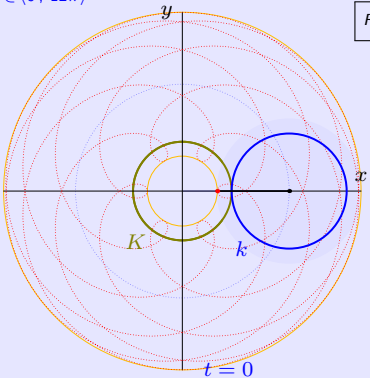
$x = (R+r)\cos\frac{rt}{R} - c\cos\frac{(R+r)t}{R},\ y = (R+r)\sin\frac{rt}{R} - c\sin\frac{(R+r)t}{R},\ t \in R.$

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

$x = \frac{13r}{7}\cos\frac{7t}{6} - \frac{5r}{4}\cos\frac{13t}{6},\ y = \frac{13r}{7}\sin\frac{7t}{6} - \frac{5r}{4}\sin\frac{13t}{6}$

$t \in \langle 0\,;\ 12\pi\rangle$

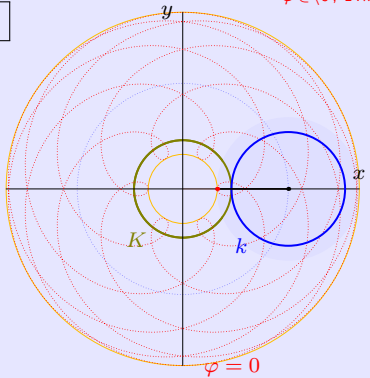
$R = \frac{6r}{7},\ c = \frac{5r}{4}$



$t = 0$

$x = \frac{13r}{7}\cos\varphi - \frac{5r}{4}\cos\frac{13\varphi}{7},\ y = \frac{13r}{7}\sin\varphi - \frac{5r}{4}\sin\frac{13\varphi}{7}$

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



$\varphi = 0$