Epicykloida – skrátená

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

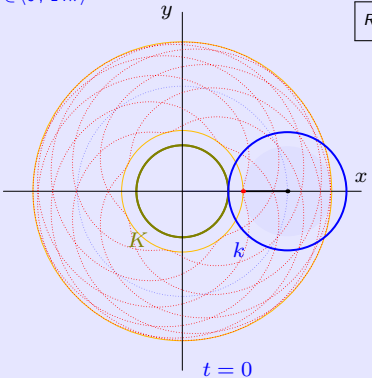
$x = (R+r)\cos\frac{rt}{R} - c\cos\frac{(R+r)t}{R},\ y = (R+r)\sin\frac{rt}{R} - c\sin\frac{(R+r)t}{R},\ t \in R.$

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

$x = \frac{16r}{9}\cos\frac{9t}{7} - \frac{3r}{4}\cos\frac{16t}{7},\ y = \frac{16r}{9}\sin\frac{9t}{7} - \frac{3r}{4}\sin\frac{16t}{7}$

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

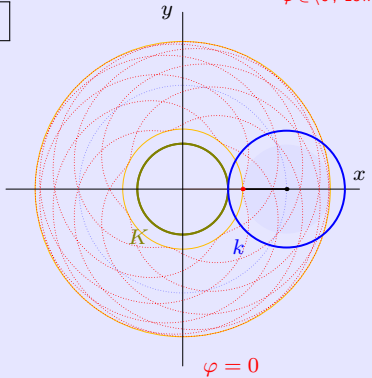
$R = \frac{7r}{9},\ c = \frac{3r}{4}$



$t = 0$

$x = \frac{16r}{9}\cos\varphi - \frac{3r}{4}\cos\frac{16\varphi}{9},\ y = \frac{16r}{9}\sin\varphi - \frac{3r}{4}\sin\frac{16\varphi}{9}$

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



$\varphi = 0$