Epicykloida – skrátená

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

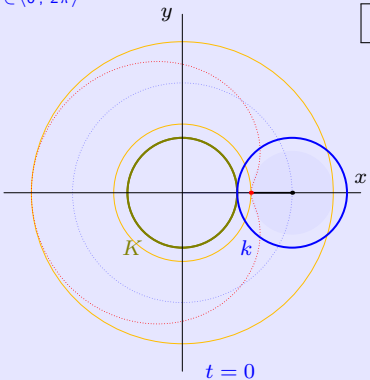
$x = (R+r)\cos\frac{rt}{R} - c\cos\frac{(R+r)t}{R},\ y = (R+r)\sin\frac{rt}{R} - c\sin\frac{(R+r)t}{R},\ t \in R.$

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

$x = 2r\cos t - \frac{3r}{4}\cos 2t,\ y = 2r\sin t - \frac{3r}{4}\sin 2t$

$t \in \langle 0\,;\ 2\pi\rangle$

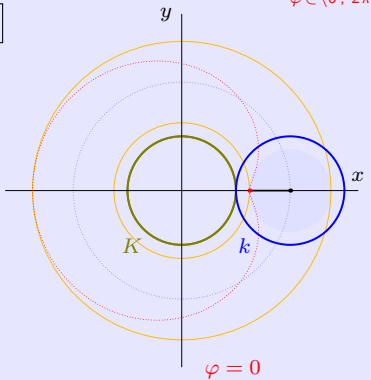
$R = r,\ c = \frac{3r}{4}$



$t = 0$

$x = 2r\cos\varphi - \frac{3r}{4}\cos 2\varphi,\ y = 2r\sin\varphi - \frac{3r}{4}\sin 2\varphi$

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



$\varphi = 0$