# Pericykloida – skrátená

$c > r > R > 0$

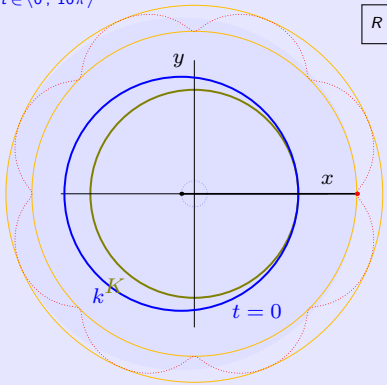
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R},\ y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R},\ t \in R.$

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

$x = -\frac{r}{9}\cos\frac{9t}{8} + \frac{3r}{2}\cos\frac{t}{8},\ y = -\frac{r}{9}\sin\frac{9t}{8} + \frac{3r}{2}\sin\frac{t}{8}$

$t \in \langle 0\,;\ 16\pi \rangle$

$R = \frac{8r}{9},\ c = \frac{3r}{2}$




$x = -\frac{r}{9}\cos\varphi + \frac{3r}{2}\cos\frac{\varphi}{9},\ y = -\frac{r}{9}\sin\varphi + \frac{3r}{2}\sin\frac{\varphi}{9}$

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