Pericykloida – skrátená

$c > r > R > 0$

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

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

$x = \frac{(1-\pi)r}{\pi}\cos\pi t + \frac{3r}{2}\cos(\pi-1)t$
$y = \frac{(1-\pi)r}{\pi}\sin\pi t + \frac{3r}{2}\sin(\pi-1)t$
$t \in \langle 0\,;\ 6.2\pi\rangle$

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

$x = \frac{(1-\pi)r}{\pi}\cos\varphi + \frac{3r}{2}\cos\frac{(\pi-1)\varphi}{\pi}$
$y = \frac{(1-\pi)r}{\pi}\sin\varphi + \frac{3r}{2}\sin\frac{(\pi-1)\varphi}{\pi}$
$\varphi \in \langle 0\,;\ 19.4779\pi\rangle$