Pericykloida – skrátená

$c > r > R > 0$

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

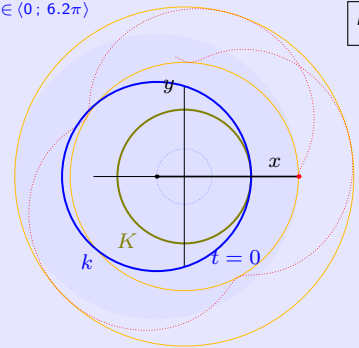
$x = (R-r)\cos\varphi + c\cos\frac{(R-r)\varphi}{r}$, $y = (R-r)\sin\varphi - c\sin\frac{(R-r)\varphi}{r}$, $\varphi \in R$.

$x = \frac{(1-\sqrt{2})r}{\sqrt{2}}\cos\sqrt{2}t + \frac{3r}{2}\cos(\sqrt{2}-1)t$

$y = \frac{(1-\sqrt{2})r}{\sqrt{2}}\sin\sqrt{2}t + \frac{3r}{2}\sin(\sqrt{2}-1)t$

$t \in \langle 0\,;\ 6.2\pi \rangle$

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



$x = \frac{(1-\sqrt{2})r}{\sqrt{2}}\cos\varphi + \frac{3r}{2}\cos\frac{(\sqrt{2}-1)\varphi}{\sqrt{2}}$

$y = \frac{(1-\sqrt{2})r}{\sqrt{2}}\sin\varphi + \frac{3r}{2}\sin\frac{(\sqrt{2}-1)\varphi}{\sqrt{2}}$

$\varphi \in \langle 0\,;\ 8.7681\pi \rangle$