Hypocykloida – obyčajná hypocykloida $c = r$, $R > 0$, $r > 0$

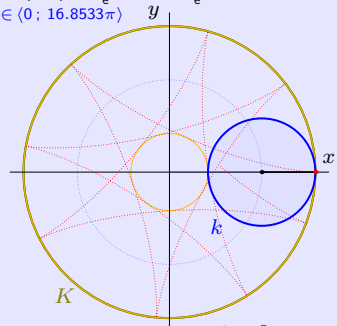
$x = (R-r)\cos\frac{rt}{R} + c\cos\frac{(R-r)t}{R}$, $y = (R-r)\sin\frac{rt}{R} - c\sin\frac{(R-r)t}{R}$, $t \in R$.

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

$x = (\mathrm{e}-1)r\cos\frac{t}{\mathrm{e}} + r\cos\frac{(\mathrm{e}-1)t}{\mathrm{e}}$

$y = (\mathrm{e}-1)r\sin\frac{t}{\mathrm{e}} - r\sin\frac{(\mathrm{e}-1)t}{\mathrm{e}}$

$t \in \langle 0\,;\ 16.8533\pi\rangle$



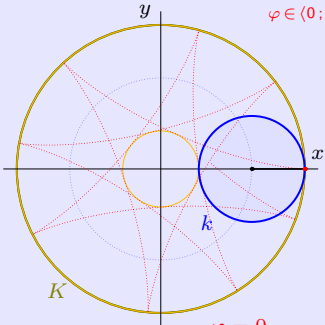
$t = 0$

$R = \mathrm{e}\,r$, $c = r$

$x = (\mathrm{e}-1)r\cos\varphi + r\cos(\mathrm{e}-1)\varphi$

$y = (\mathrm{e}-1)r\sin\varphi - r\sin(\mathrm{e}-1)\varphi$

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



$\varphi = 0$