Epicykloida – obyčajná $c = r,\ R > 0,\ r > 0$

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

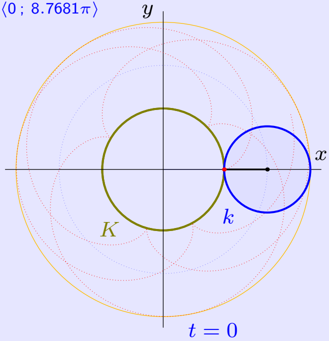
$$x = (R+r)\cos\varphi - c\cos\frac{(R+r)\varphi}{r},\quad y = (R+r)\sin\varphi - c\sin\frac{(R+r)\varphi}{r},\quad \varphi \in R.$$

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

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

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

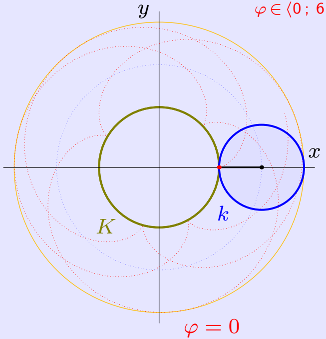
$t \in \langle 0\,;\ 8.7681\pi\rangle$



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

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

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



beerb@frcatel.fri.uniza.sk http://frcatel.fri.uniza.sk/ beerb