Epicykloida – predĺžená

$c > r > 0,\ R > 0$

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

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

$x = \frac{12r}{7}\cos\frac{7t}{5} - \frac{3r}{2}\cos\frac{12t}{5},\ y = \frac{12r}{7}\sin\frac{7t}{5} - \frac{3r}{2}\sin\frac{12t}{5}$
$t \in \langle 0\,;\,10\pi \rangle$

$x = \frac{12r}{7}\cos\varphi - \frac{3r}{2}\cos\frac{12\varphi}{7},\ y = \frac{12r}{7}\sin\varphi - \frac{3r}{2}\sin\frac{12\varphi}{7}$
$\varphi \in \langle 0\,;\,14\pi \rangle$

$$R = \frac{5r}{7},\ c = \frac{3r}{2}$$