

Epicykloida – skrátená

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

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

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

$$x = \frac{11r}{8} \cos \frac{8t}{3} - \frac{3r}{4} \cos \frac{11t}{3}, \quad y = \frac{11r}{8} \sin \frac{8t}{3} - \frac{3r}{4} \sin \frac{11t}{3} \quad x = \frac{11r}{8} \cos \varphi - \frac{3r}{4} \cos \frac{11\varphi}{8}, \quad y = \frac{11r}{8} \sin \varphi - \frac{3r}{4} \sin \frac{11\varphi}{8}$$

$t \in \langle 0; 6\pi \rangle$ $\varphi \in \langle 0; 16\pi \rangle$

$$R = \frac{3r}{8}, \quad c = \frac{3r}{4}$$