

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

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

$$x = (\sqrt{11}-1)r \cos \frac{t}{\sqrt{11}}$$

$$y = (\sqrt{11}-1)r \sin \frac{t}{\sqrt{11}}$$

$$t \in (0; 20.5631\pi)$$

$$R = \sqrt{11}r, c = 0$$

$$x = (\sqrt{11}-1)r \cos \varphi$$

$$y = (\sqrt{11}-1)r \sin \varphi$$

$$\varphi \in (0; 6.2\pi)$$