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

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

$x = -\frac{5r}{8}\cos\frac{8t}{3},\ y = -\frac{5r}{8}\sin\frac{8t}{3}$
$t \in \langle 0\,;\ 6\pi\rangle$

$x = -\frac{5r}{8}\cos\varphi,\ y = -\frac{5r}{8}\sin\varphi$
$\varphi \in \langle 0\,;\ 16\pi\rangle$

$R = \frac{3r}{8},\ c = 0$