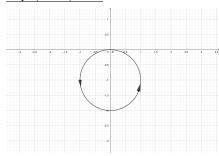
- 1. $\bullet \star : r = -2\sin(\theta)$
 - $x = \cos(\theta) * r \stackrel{\star}{\Rightarrow} x = \cos(\theta) \cdot (-2\sin(\theta))$
 - $x = \sin(\theta) * r \stackrel{\star}{\Rightarrow} y = -2\sin^2(\theta)$

$$\left\{ \begin{array}{l} x(t) = -2 \cdot \cos(t) \sin(t) \\ y(t) = -2 \sin^2(\theta) \\ 0 \leq t < \pi \end{array} \right.$$

t	\boldsymbol{x}	y
$\frac{\pi}{4}$	-1	-1
$\frac{\frac{\pi}{4}}{\frac{\pi}{2}}$	0	-2
π	0	0
$\frac{3\pi}{4}$	1	-1



- 2. $\bullet \star : r = 1 \cos(\theta)$
 - $x = r \cdot \cos(\theta) \stackrel{\star}{\Rightarrow} x = \cos(\theta) \cos^2(\theta)$
 - $y = r \cdot \sin(\theta) \stackrel{\star}{\Rightarrow} y = \sin(\theta) \sin(\theta) \cdot \cos(\theta)$

$$r = \sqrt{x^2 + t^2} \stackrel{\star}{\Rightarrow}$$

$$\begin{array}{l} \sqrt{x^2+t^2} = 1-\cos(\theta) \stackrel{\cos(\theta) = \frac{x}{\sqrt{x^2+y^2}}}{\equiv} \\ \sqrt{x^2+t^2} = 1-\frac{x}{\sqrt{x^2+y^2}} \equiv \end{array}$$

$$\begin{aligned} x^2 + y^2 &= \sqrt{x^2 + y^2} - x \\ \left\{ \begin{array}{l} x(\theta) &= \cos(\theta) - \cos^2(\theta) \\ y(\theta) &= \sin(\theta) - \sin(\theta) \cdot \cos(\theta) \\ 0 &\leq \theta < 2\pi \end{array} \right. \end{aligned}$$

t	x	y
0	0	0
π	-2	0

