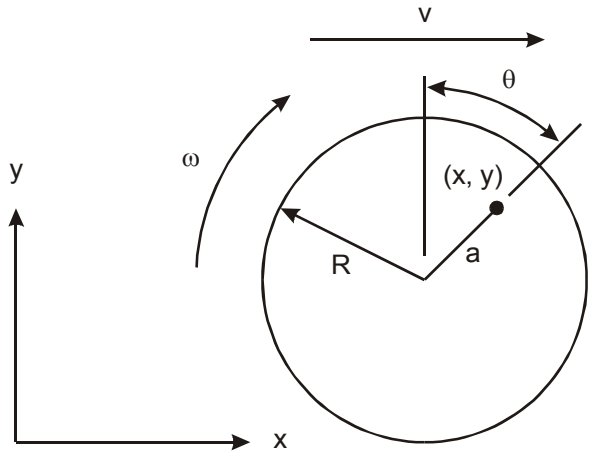
Cycloid Path



$R := 1 \qquad a := 0.5 \cdot R$

$\omega := 1 \qquad v := \omega \cdot R \qquad \theta(t) := \omega \cdot t$

$x(t) := v \cdot t + a \cdot \sin(\theta(t))$

$y(t) := R + a \cdot \cos(\theta(t))$

$$t := 0, 0.01 .. \frac{2 \cdot \pi}{\omega}$$