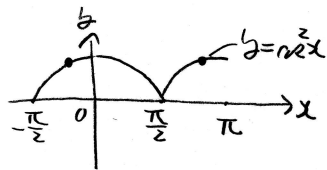


$$\cos(t + \frac{\pi}{3}) = \cos(t - \frac{\pi}{6} + \frac{\pi}{2}) = -\sin(t - \frac{\pi}{6})$$

$$x^2 + y^2 = 4\cos^2(t - \frac{\pi}{6}) + \sin^2(t - \frac{\pi}{6}) = 3\cos^2(t - \frac{\pi}{6}) + 1$$

$$0 \leq t \leq \pi \text{ かつ } -\frac{\pi}{6} \leq t - \frac{\pi}{6} \leq \frac{5}{6}\pi$$



$t - \frac{\pi}{6} = 0, t = \frac{\pi}{6}$ のとき最大値 2 をとる.

$t - \frac{\pi}{6} = \frac{\pi}{2}, t = \frac{2}{3}\pi$ のとき最小値 1 をとる.