$x = \cos(2t), \quad y = \cos(t), \quad 0 < t < \pi.$

$\dfrac{dy}{dx} = \dfrac{dy/dt}{dx/dt} = \dfrac{-\sin(t)}{-2\sin(2t)} = \dfrac{\sin(t)}{2 \cdot 2\sin(t)\,\cos(t)} = \dfrac{1}{4\cos(t)} = \dfrac{1}{4}\sec(t)$, so

$\dfrac{d^2y}{dx^2} = \dfrac{\dfrac{d}{dt}\left(\dfrac{dy}{dx}\right)}{dx/dt} = \dfrac{\frac{1}{4}\sec(t)\,\tan(t)}{-4\sin(t)\,\cos(t)} = -\dfrac{1}{16}\sec^3(t).$

The curve is CU when $\sec^3(t) < 0 \quad \Rightarrow \quad \sec(t) < 0 \quad \Rightarrow$

$\cos(t) < 0 \quad \Rightarrow \quad \frac{\pi}{2} < t < \pi.$