

Quiz 1

Math 53, section 213

September 7, 2014

1. For the parametric curve given by $x = t^2 + 1$, $y = t^2 + t$, find dy/dx and d^2y/dx^2 in terms of t . For which values of t is the curve concave upward?

2. Identify the curve

$$r^2 \cos(2\theta) = 1$$

by finding a Cartesian equation for the curve.