QUIZ (1a) __S.ID:___ MATH 201-181 _Sec.() Ser.# (

Consider the parametric equations $x = \overline{t^2 + 1}$, $y = t^2 + t$.

- 1. Graph the curve and the direction for $-3 \le t \le -1$.
- 2. Find $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$. For which values of t is the curve concave upward?