

CS 557
Homework 14
Due Thursday, 29 October 2009

1. Find the implicit equation of the curve:

$$x = \frac{t}{t^2 + 1}; \quad y = \frac{t^2 - 1}{t^2 + 1}.$$

2. Find an inversion equation for the curve in Problem 1 and use it to find the parameter corresponding to $(x, y) = (\frac{2}{5}, -\frac{3}{5})$.
3. Find a second inversion equation for the curve in Problem 1 and use it to find the parameter corresponding to $(x, y) = (\frac{2}{5}, -\frac{3}{5})$.