LAST NAME: FIRST NAME:

Math 65B - Summer 2016

Quiz 12: Thursday July 21, 2016

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1. (1 point) Eliminate the parameter for the following parameterized curve. Sketch the curve and use arrows to denote the direction.

$$x = \sin(t), \quad y = \csc(t), \quad 0 < t < \frac{\pi}{2}$$

Please, show all work.

2. (1 point) Find $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$. For what values of t is the curve concave up?

$$x = 2\sin(t), \quad y = 3\cos(t), \quad 0 < t < 2\pi$$

Please, show all work.