

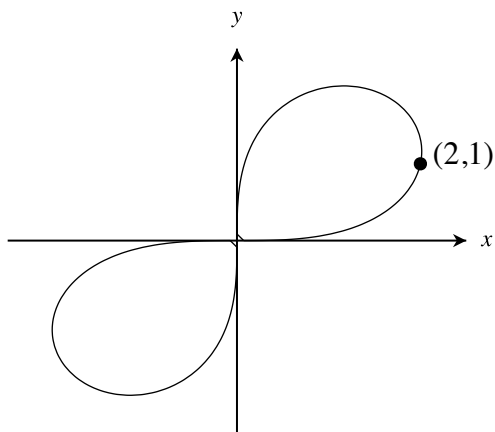
Name: \_\_\_\_\_

Math 105: Fall 2013

Quiz 6: November 1

Good Luck!

1. The graph of  $2(x^2 + y^2)^2 = 25xy$  is shown below (graph not to scale). Use implicit differentiation to compute the slope of the line tangent to the graph at  $(2, 1)$ .



OVER

2. Let  $f(x) = \arcsin(2x + 1)$ .

(a) Find  $f\left(\frac{-3}{4}\right)$ . Express your answer exactly, not as a decimal approximation.

(b) Find  $f'\left(\frac{-3}{4}\right)$ . Express your answer as a decimal approximation.

