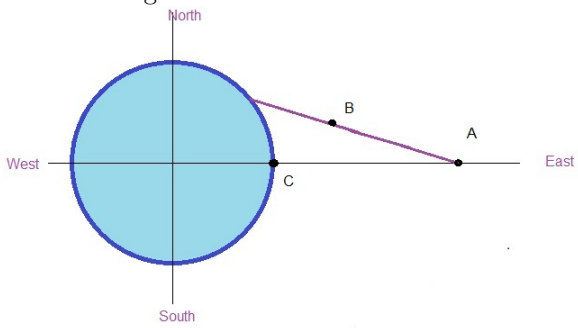
## Math 124, Spring 2013, Quiz 1

## April 9, 2013

**Name**_____

**TA/Section**_____

There is a circular lake of radius 5 miles and a path that goes around the lake. At $t = 0$, Kate starts riding her bike in a straight line starting at point A, 7 miles East of the center of the lake. She keeps her speed constant and at $t = 4$ minutes, passes throught the point $B$, 6 miles East and 1 mile North of the center of the lake. The figure below is not to scale.




1. (3 points) Find parametric equations for Kate's linear motion.

2. (3 points) When does she get to the path around the lake? What are her coordinates when she gets to the lake?