# Parametric Polar Review Quiz Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A curve is defined by the parametric equations and . What is in terms of ?
2. A particle moves on a plane curve so that at any time its - coordinate is and its -coordinate is . The acceleration vector of the particle at is
3. What is the slope of the line tangent to the polar curve at ?
4. The area of the region inside the polar curve and outside the polar curve is given by
5. The function satisfies . For , find the value of that gives the point on the graph that is farthest from the origin. Justify your answer.