

MAT132, Paper Homework 5

1. a) Plot the graph of the curve $r = \cos(\theta)$ in the plane. Remember that r can be negative!

b) Find an equation for this curve in x, y -coordinates. Hint: multiply both sides by r .

c) Describe this curve geometrically.

2. Find the area inside the graph of the curve $r = \sin(2\theta)$ in the plane.