MATH 009C - Summer 2017
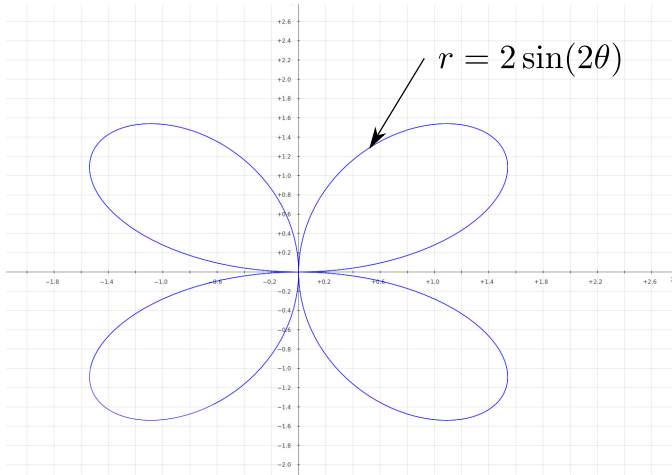
Quiz 3: July 11, 2017

1. Find the area of one petal of the polar rose given by:
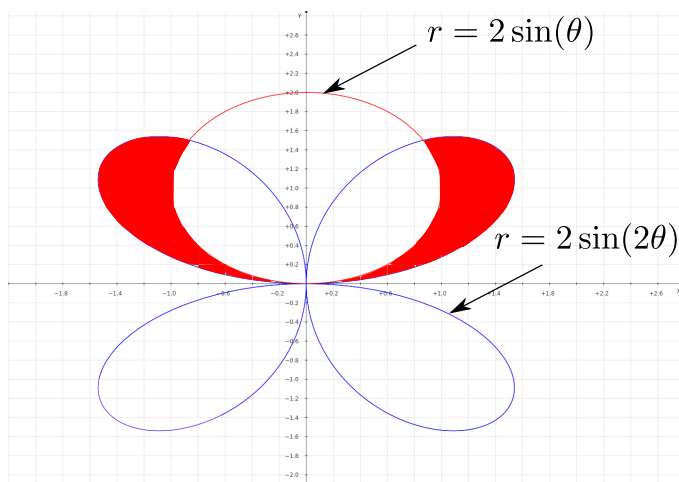
$$r = 2\sin(2\theta)$$

$r = 2\sin(2\theta)$

Please, show all work.

2. Find the area of the region that lies outside the circle and inside the polar rose (the region is shaded in the labeled plot below).

$$r = 2\sin(\theta) \qquad r = 2\sin(2\theta)$$

$r = 2\sin(\theta)$

$r = 2\sin(2\theta)$

Please, show all work.