

Polar coordinates

Questions

Question 1. Determine which of the following polar coordinates (r, θ) does NOT represent the same point as the other four:

$$(3, -5\pi/4), (3, 3\pi/4), (-3, -\pi/4), (-3, 3\pi/4), (-3, 7\pi/4)$$

Question 2. What shape in the xy -plane does the polar curve $r = \csc \theta$ describe?

Question 3. On the backside of this sheet of paper, indicate **all** regions in the given r, θ -grid that correspond to the shaded regions A and B in Figure 1.

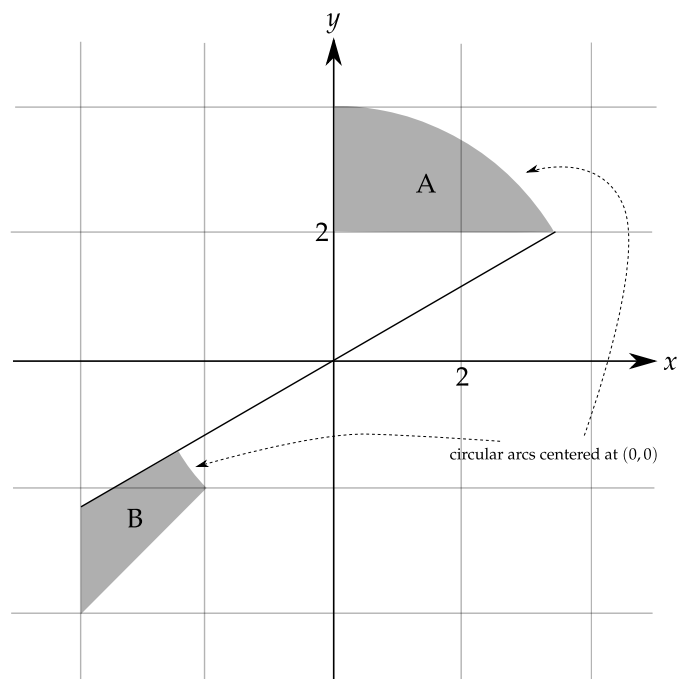


FIGURE 1. The two curved arcs are parts of circles centered at the origin. All other sides are straight lines.

