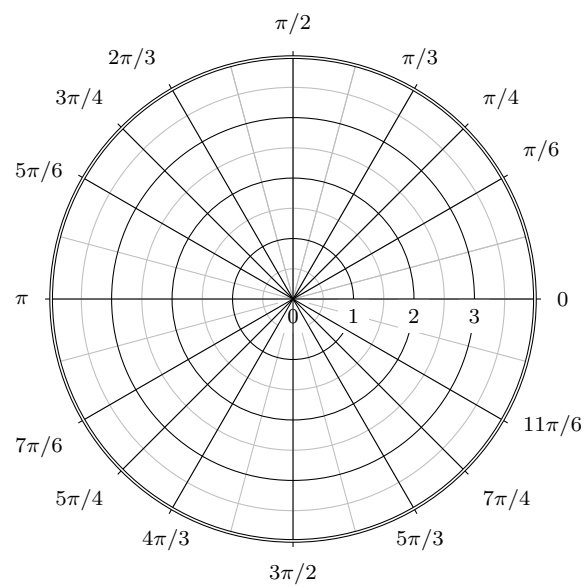
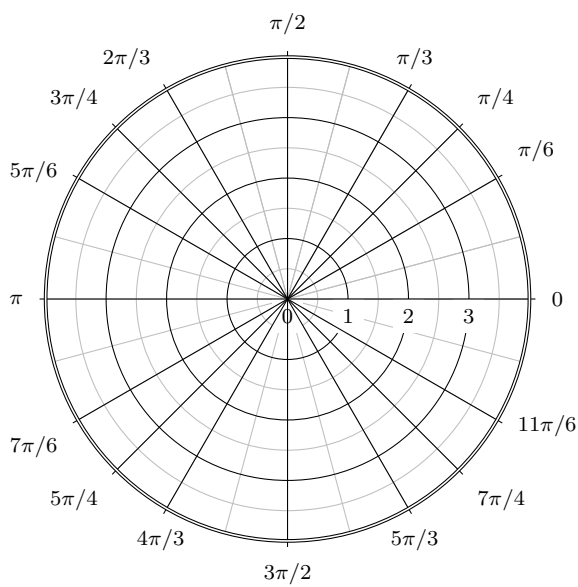


SECTION 7.3: POLAR COORDINATES (DAY 1)

(1) The definition of polar coordinates

(2) In the polar grids below, graph the points $P = (2.5, 5\pi/4)$, $Q = (-3, \pi/2)$, $r = 1$, and $\theta = \pi/6$.



(3) The points below are in polar coordinates. Convert them to rectangular coordinates.

(a) $(5, 5\pi/3)$

(b) $(-0.5, -5\pi/6)$

(4) The points below are in rectangular coordinates. Convert them to polar coordinates.

(a) $(-8, 8)$

(b) $(2\sqrt{3}, 2)$

(5) Describe the graph of each polar equation below and convert it to a rectangular equation.

(a) $r = 4$

(b) $r = 5 \csc(\theta)$