

SECTION 7.3: POLAR COORDINATES (DAY 2)

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

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

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

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

(a) $(-8, 8)$

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

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

(a) $r = 4$

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

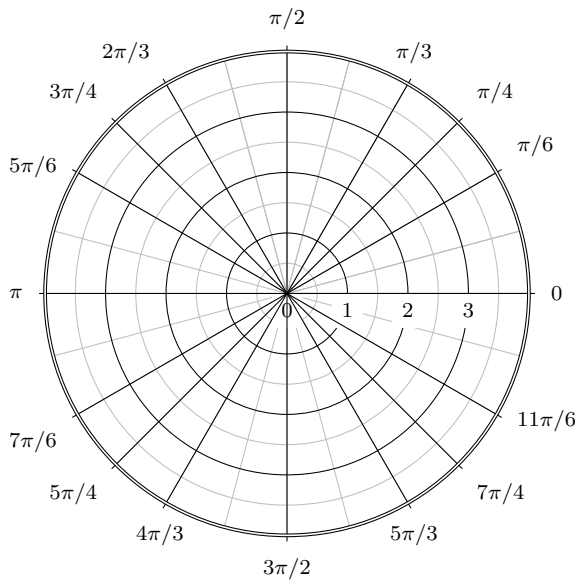
(4) Convert the equations below from rectangular equations to polar equations.

(a) $x^2 + y^2 = 20$

(b) $y = 5x^2$

(5) Sketch the graph of the polar equations below.

(a) $r = 3 - 2 \sin(\theta)$



(b) $r = 2 \cos(3\theta)$

