

## Assignment 3

Coverage: 15.4 in Text.

Exercises: 15.3. no 5, 7, 12, 15, 18, 29, 30. 15.4. no 13, 15, 17, 19, 22, 24, 25, 27, 29, 30, 34, 35, 40, 42, 43, 46.

Submit 15.4 no. 22, 24, 27, 35 by Feb 8.

### Supplementary Problems

1. Express the straight line  $ax + by = 1$ ,  $a, b > 0$ , in polar coordinates. What is the range of  $\theta$ ?
2. Express the hyperbola  $x^2 - y^2 = 1$  ( $y \geq 0$ ) in polar coordinates. What is the range of  $\theta$ ?