

## Assignment 3

Coverage: 15.4 in Text.

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

Submit no. 22, 24, 27, 35 by Sept 28.

### Supplementary Problems

1. Express the straight line  $ax + by = 1$ ,  $a, b > 0$ , in polar coordinates. How about  $ax + by = 0$ ?
2. Express the hyperbola  $x^2 - y^2 = 1$  ( $y \geq 0$ ) in polar coordinates? How about  $xy = a^2 > 0$  in the first quadrant?