Assignment 3

Coverage: 15.4 in Text.

Exercises: 15.4. no 13, 15, 17, 19, 22, 24, 25, 27, 29, 30, 34, 36, 41, 42, 43, 46.

Submit no. 22, 24, 29, 36, 41 by Feb 7.

Supplementary Problems

1. Let D be the region bounded by $y = x^2$ and $y = 2$. Express D in polar coordinates. Hint: Decompose D into three regions.

2. Let D be the region described by $0 \leq x \leq 1, 0 \leq y \leq \sqrt{1 - x^2} + 1$. Describe it in polar coordinates. Hint: Decompose D into two regions.