

# CSEP 521 - Spring 2005

## Assignment 4

Due 4/28/05

1. Consider the following Linear Program:

- Maximize

$$3x + 5y$$

- Subject to

$$x \leq 4$$

$$y \leq 6$$

$$3x + 2y \leq 18$$

$$x, y \geq 0$$

- Draw the feasible region.
  - Determine the solution graphically.
  - Put the LP into slack form.
  - Solve the LP using the Simplex algorithm.
  - Show which vertices of the feasible region are visited in your pivot steps.
- Problem 29.2.7 on page 790 of CLRS.
  - Problem 29.5.7 on page 817 of CLRS.