

## Attendance Quiz for Lecture 7

NAME: (print!) \_\_\_\_\_

E-MAIL ADDRESS: (print!) \_\_\_\_\_

1. Consider the linear programming problem

Maximize  $z = 3x + 2y$  subject to

$$2x - y \leq 6 \quad , \quad 2x + y \leq 10 \quad , \quad x \geq 0 \quad , \quad y \geq 0 \quad .$$

- (a) Transform this problem to a problem in **canonical form**.
- (b) Find all **basic solutions** and label them according to whether there are *feasible* (*f*) or *not feasible* (*n*)
- (c) Find the optimal solution (or solutions in case there is more than one) and the optimal value.