

## Worksheet 1/27/2025

Use the simplex method to solve the following linear programming problems:

1) maximize  $P = x + 4y$

subject to

$$x - y \geq -4,$$

$$3x - y \geq -3,$$

$$x - 2y \leq 2,$$

$$x, y \geq 0.$$

2) minimize  $C = 2x + 3y - z$

subject to

$$3y + z \leq 1,$$

$$2x + y - z \geq 5,$$

$$x, y, z \geq 0.$$