## Worksheet 1/22/2025

1. Solve the linear programming the problem by graphical method:

maximize P = x - ysubject to  $x + 2y \le 4$ ,  $2x - y \le 1$ ,  $x, y \ge 0$ .

2. Write the following linear programming problem in standard form and introduce slack variables to convert all inequalities into equalities.

maximize P = x + y + zsubject to  $x - 2y \ge 2$ ,  $2x + 3z \le 5$ ,  $x + y - z \ge 2$ .  $x, y, z \ge 0$ .