

ASSIGNMENT

Solve the following optimization problem using Microsoft Excel;

1. Minimize $31 - 11x_1 - 5x_2 + 3x_1^2 + x_2^2$

2. Minimize $31 - 11x_1 - 5x_2 + 3x_1^2 + x_2^2$

subject to

$$x_1 + x_2 \leq 3$$

$$x_1^2 + x_2^2 = 8$$

3. Maximize: $Z = 3x_1 + 2x_2$

subject to constraints

$$2x_1 + x_2 \leq 10$$

$$x_1 + x_2 \leq 8$$

$$x_1 \leq 4$$