



IT-UNIVERSITY OF COPENHAGEN

INTELLIGENT SYSTEMS PROGRAMMING

Mandatory exercise 8

Tróndur Høgnason (thgn@itu.dk)

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1)

Maximize: $-2x_1 + 3x_2$

Subject to:

$$-x_1 + x_2 \leq 3$$

$$-x_1 + 2x_2 \leq 8$$

$$x_1 - 4x_2 \leq 4$$

$$x_1, x_2 \geq 0$$

2)

Maximize: Z

Subject to:

$$x_3 = 3 + x_1 - x_2$$

$$x_4 = 8 + x_1 - 2x_2$$

$$x_5 = 4 - x_1 + 4x_2$$

$$Z = -2x_1 + 3x_2$$

$$x_1, x_2, x_3, x_4, x_5 \geq 0$$

3)

4)

5)