

HL - opgave 4.4.9

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Work through the simplex method step by step (in tabular form) to solve the following problem:

$$\begin{array}{ll} \text{Maximize} & Z = 2x_1 - x_2 + x_3. \\ \text{subject to :} & \\ & 3x_1 + x_2 + x_3 \leq 6 \\ & x_1 - x_2 + 2x_3 \leq 1 \\ & x_1 + x_2 - x_3 \leq 2 \\ \text{and} & \\ & x_1 \geq 0, \quad x_2 \geq 0, \quad x_3 \geq 0. \end{array}$$