Assignment 7   **Due: 2.6.2022 (3.11.1443 AH)**

Q1)

Use the **<u>Dual Simplex method</u>** to solve the following Linear Programming Problem (show all the steps):

Minimize:

$$3x_1 + 9x_2$$

Subject to the following constraints:

$$2x_1 + x_2 \geq 8$$
$$x_1 + 2x_2 \geq 8$$
$$x_1 \geq 0, \quad x_2 \geq 0$$

Q2)

Assume we have the points:

$$(2,5), \ (3,8), \ (4,14) \text{ and } (5, 20)$$

Write **all** the equations that specify the "natural" quadratic spline that goes through those points.