6.3.1

Work through the dual simplex(in tabular form) step by step to solve the following problem . Minimize

$$Z = 5x_1 + 3x_2 + 4x_3$$

$$2x_1 + x_2 + x_3 \geq 20$$
$$3x_1 + x_2 + 2x_3 \geq 30$$
$$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0,$$

See file 6.3.1.txt

6.3.2

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

$$Z = 2x_1 + x_2 + x_3 \rightarrow min$$

$$2x_1 + x_2 + x_3 \geq 6$$
$$x_1 - x_2 + 2x_3 \geq 1$$
$$x_1 + x_2 - x_3 \geq 2$$
$$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0,$$

See file 6.3.2.txt