



MATB61

Quiz 4

Last name: _____

First Name: _____

Student's Number: _____

1. LP problem

Minimize $p = 3x - 2y + z$

subject to

$$-x - y + z \leq 1$$

$$x + 2y - z \leq 5$$

$$x, y, z \geq 0$$

Set up the initial simplex tableau;

2. Consider the following tableau for a maximization problem:

	x_1	x_2	x_3	x_4	x_5	s_1	s_2	s_3	
	0	$1/3$	1	2	1	0	3	-3	1
	0	1	0	$1/2$	1	1	$-1/3$	$-1/2$	2
	1	-1	0	0	$1/3$	0	0	1	0
	0	-6	0	-3	-1	0	3	9	24

- Identify the basic variables in the above tableau.
- What basic feasible solution does the tableau represent?
- Indicate which variable should be the entering variable and which variable should be the departing variable.
- Compute the next tableau using Simplex method, and what can you tell from the new tableau?