

Quiz 2

First Name:

Last Name:

Student Number:

1) Graphically solve the following LP problem [5 points]:

$$\max \quad -x_1 + 3x_2$$

$$\begin{aligned} \text{subject to} \quad & x_1 + x_2 \geq 1 \\ & -x_1 + 3x_2 \leq 3 \\ & x_2 \leq 2 \\ & x_1, x_2 \geq 0 \end{aligned}$$

2) Prove that the following region is a convex set [5 points].

