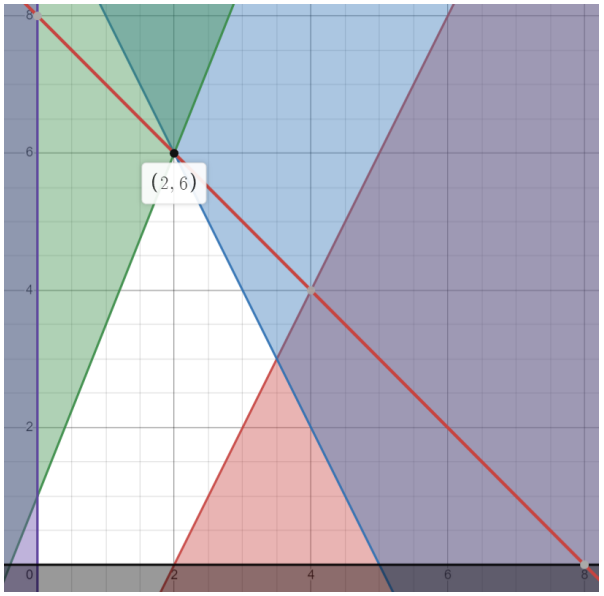
Lab 10: Linear Programming

In this lab you are to find a geometric solution to a simple LP problem with two variables x1 and x2:



max x1 + x2

S.t.

4x1 –x2 <= 8

2x1 + x2 <=10

5x1 -2x2 >= -2

X1, x2 >=0.

Q1: [10pnts]: Plot the feasible region

Q2:[10pnts] Find the optimum solution x1=2, x2=6, x1+x2=8

Q3: [10pnts] Find an additional constrain that makes this an in feasible problem x1<=-1