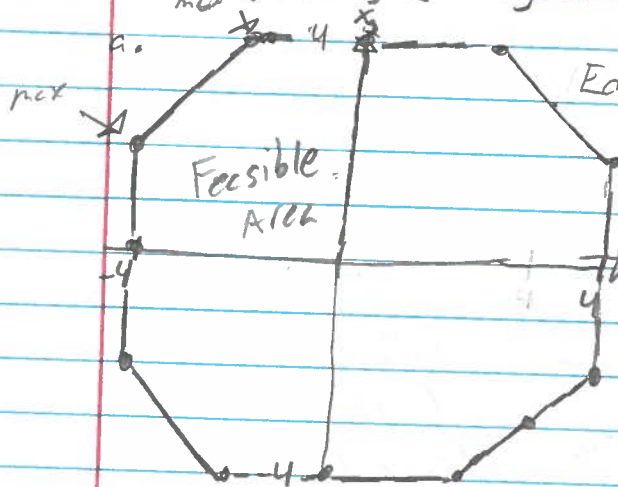Aleks Murewskes 260718387

Q1. max ?

$x_1 \geq -4$, $x_1 \leq 4$, $x_2 \geq -4$, $x_2 \leq 4$, $x_1 + x_2 \leq 6$, $x_1 + x_2 \geq 6$, $x_1 - x_2 \leq 6$, $x_1 - x_2 \geq -6$

a.

Edges seperates feasible and nonfeasible area

Feasible Area

b. find optimal soln at $(-4, 2)$

$$\text{Max } -2x_1 + x_2$$

c. find soln for $(-4, 2)$ and $(-2, 4)$ are solutions (optimal)

$$\text{Max } -2x_1 + x_2$$