

Let's find equations of lines.

$$l_1: x = -2$$

$l_2:$

$$y = mx + c$$

$$(x_1, y_1) = (-1, 0)$$

$$(x_2, y_2) = (-2, -1)$$

$$m = \frac{-1 - 0}{-2 - (-1)} = 1$$

$$y = x + c \rightarrow y_1 = x_1 + c \Rightarrow 0 = -1 + c$$

$$c = 1$$

$$\boxed{y = x + 1} \rightarrow l_2$$

$$l_3: y = mx + c$$

$$(x_1, y_1) = (1, 0)$$

$$(x_2, y_2) = (0, 1)$$

$$m = -1$$

$$y = -x + 1 \rightarrow l_3$$

$$l_4: x = 1$$

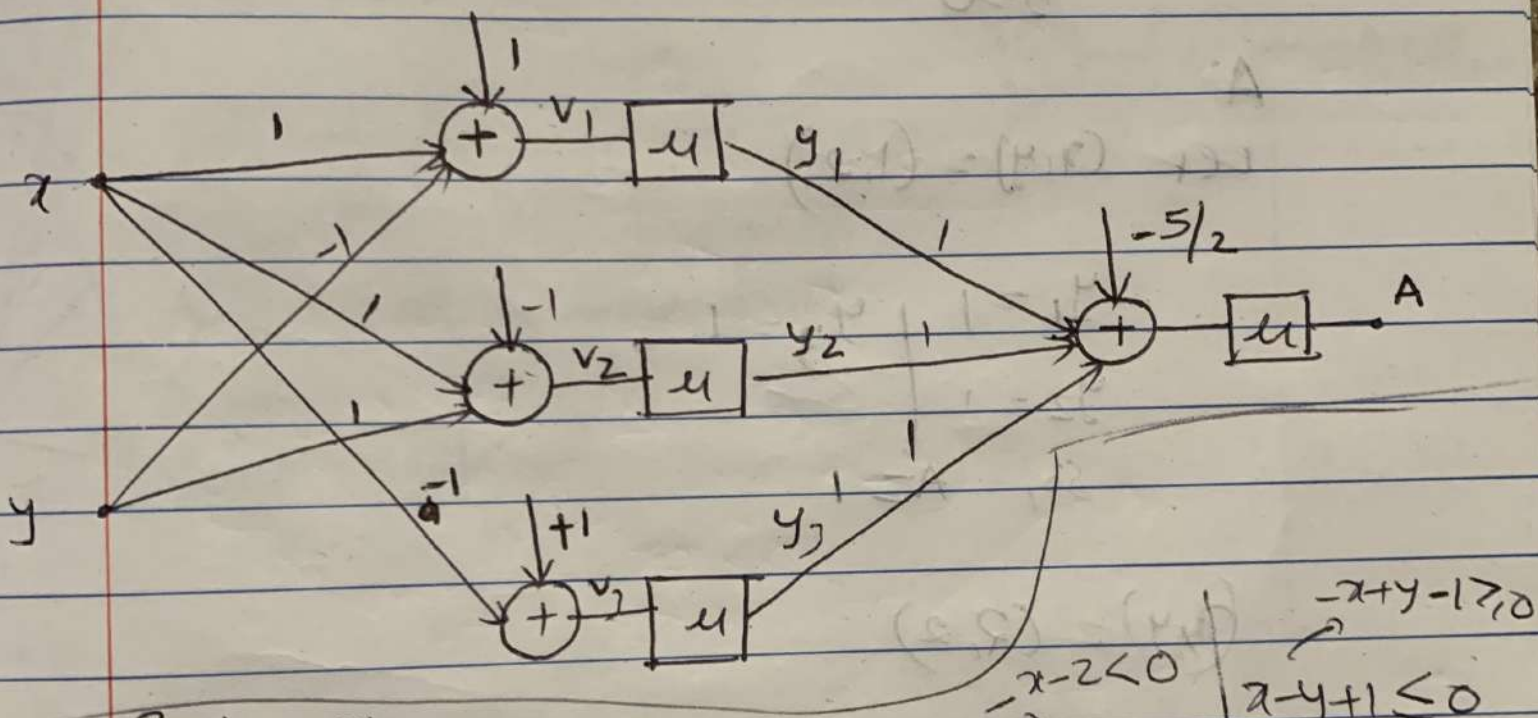
Region A:-

formed by l_2, l_3 and l_4

$$l_2: y = x + 1 \Rightarrow x - y + 1 \geq 0$$

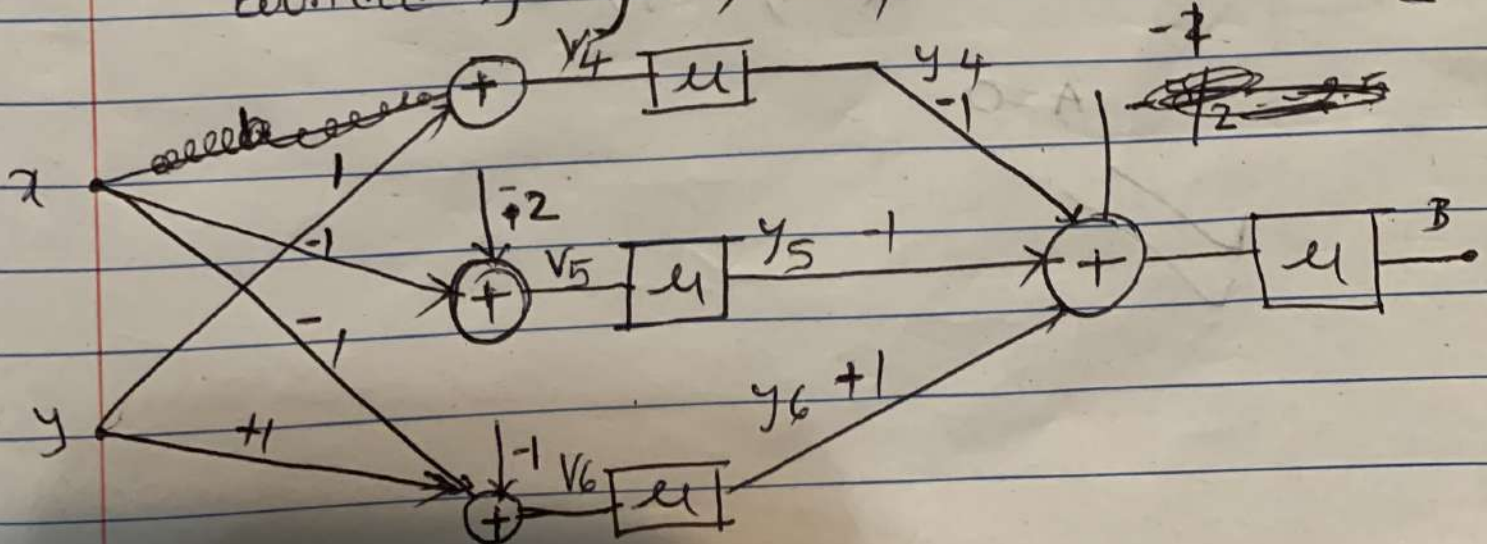
$$l_3: y = -x + 1 \Rightarrow x + y - 1 \geq 0$$

$$l_4: x = 1 \Rightarrow \cancel{x \leq 1} \leq 0 \Rightarrow -x + 1 \geq 0$$



Region B:-

bounded by $y < 0$, $x + 2 \geq 0$, $x - y + 1 \leq 0$



Verification

~~B~~ B: Let $(x, y) = (-1, 0)$

$$y_4 = 1$$

$$y_5 = 1$$

$$y_6 = 0$$

$$B = 0$$

A:

Let $(x, y) = (1, 2)$

$$y_1 = 1 \quad | \quad y_3 = 1$$

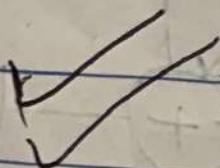
$$y_2 = 1$$

$$\text{So, } A = 1$$

$$(x, y) = (2, 2)$$

$$y_1 = 1, y_2 = 1, y_3 = 0$$

$$A = 0$$



Now the combined Network is.

