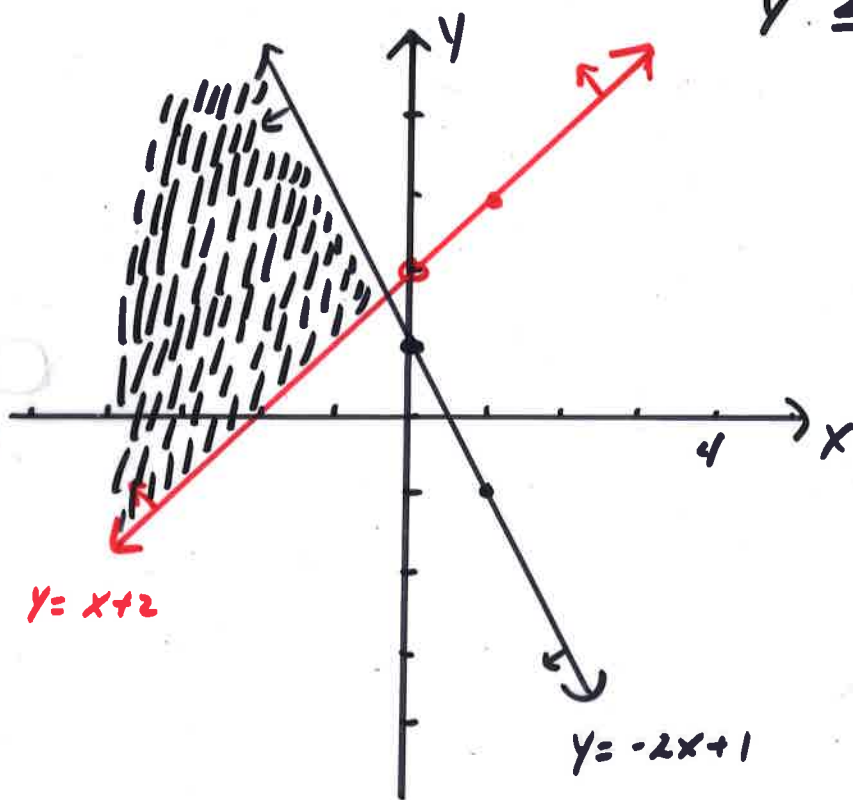


3.3 SYSTEMS OF INEQUALITIES

Ex: GRAPH

$$y \geq x + 2$$

$$y \leq -2x + 1$$



$$y \geq x + 2$$

$$y_{INT} = 2$$

$$SLOPE = 1$$

SOLID LINE

SHADED ABOVE

$$y \leq -2x + 1$$

$$y_{INT} = 1$$

$$SLOPE = -2$$

SOLID LINE

SHADED BELOW

EX: GRAPH

$$\begin{aligned} X + 2Y &\leq 7 \\ 3X - 4Y &< 1 \\ X &\geq -2 \end{aligned}$$

$$X + 2Y \leq 7$$

$$3X - 4Y < 1$$

$$X \geq -2$$

$$X_{INT}: 7$$

$$-4Y < -3X + 1$$

VERTICAL LINE

$$Y_{INT}: \frac{7}{2}$$

$$Y > \frac{3}{4}X - \frac{1}{4}$$

SOLID

SOLID

DOTTED

SHADE RIGHT

T.P. (0, 0)

ABOVE

$$0 + 2(0) \leq 7$$

TRUE

$$X + 2Y = 7$$

