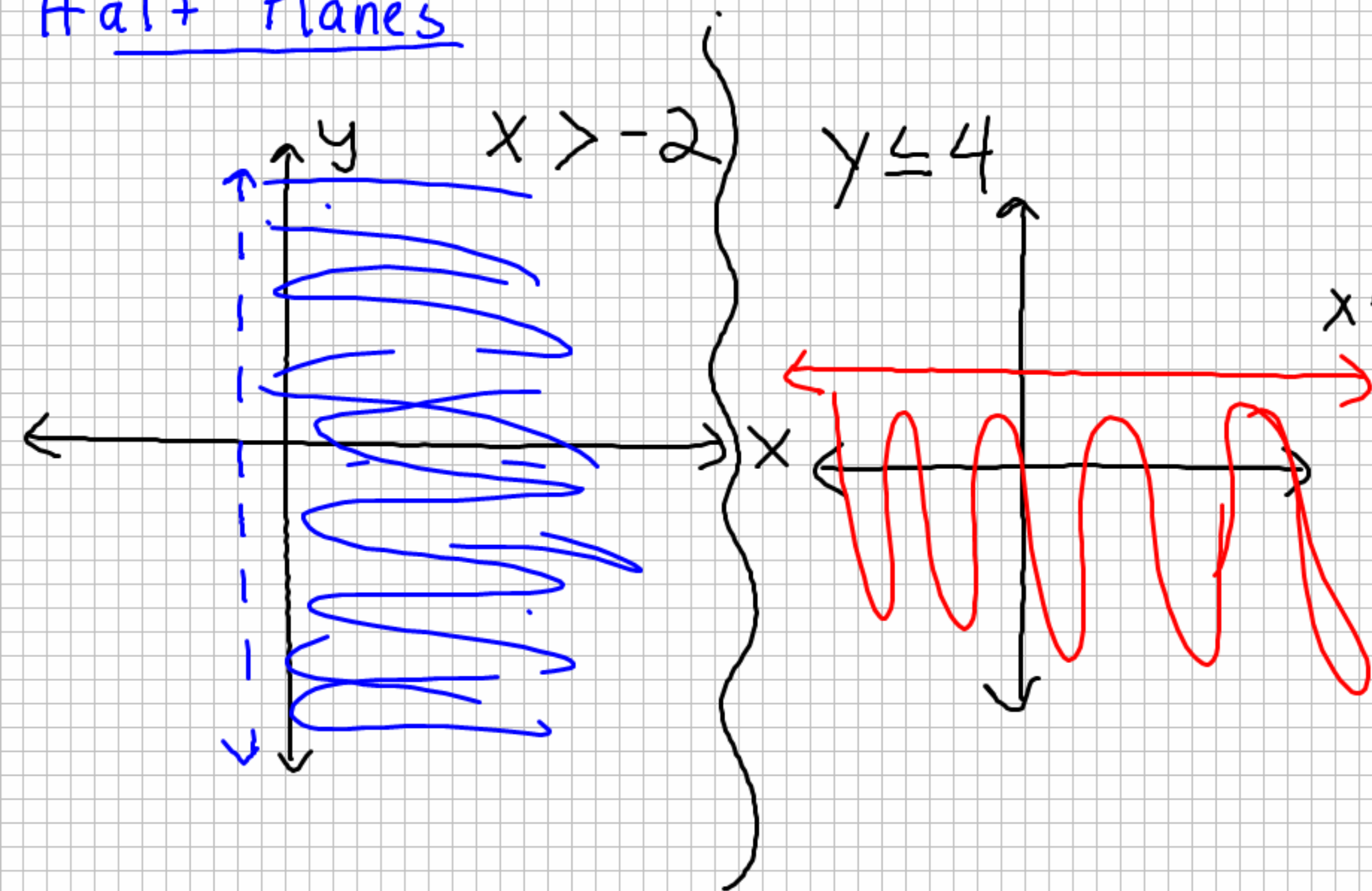


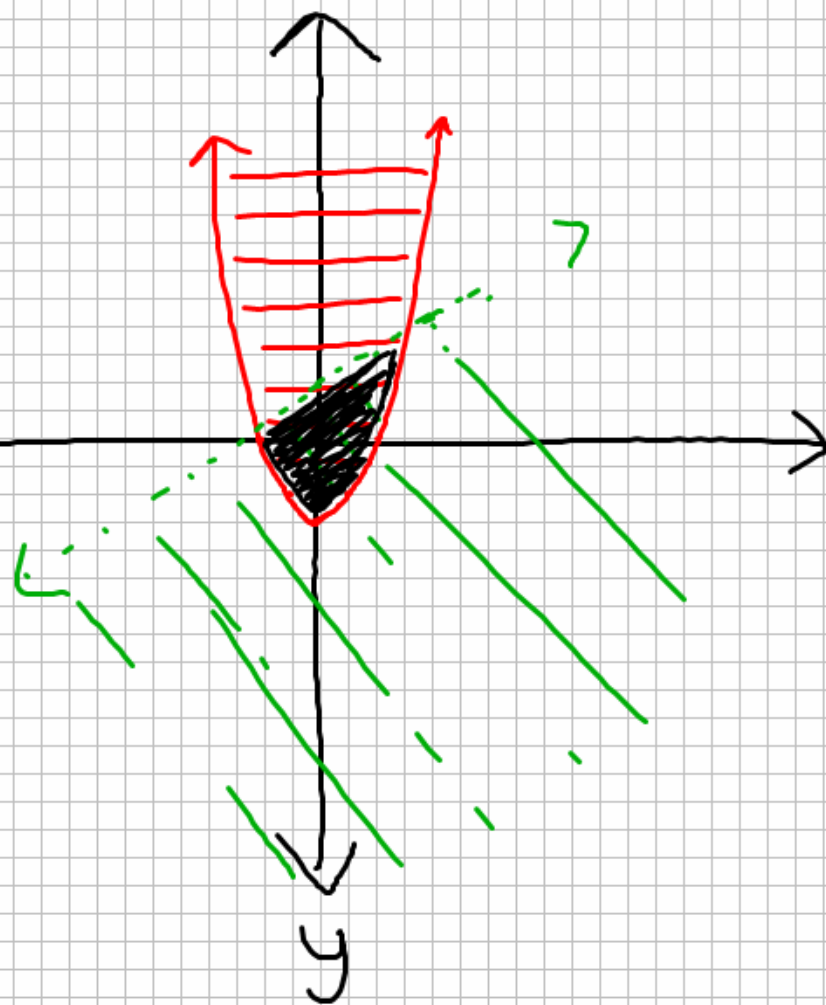
7-5 Systems of Inequalities 3/28

$<$ $>$
 $\leq$ $\geq$ _____

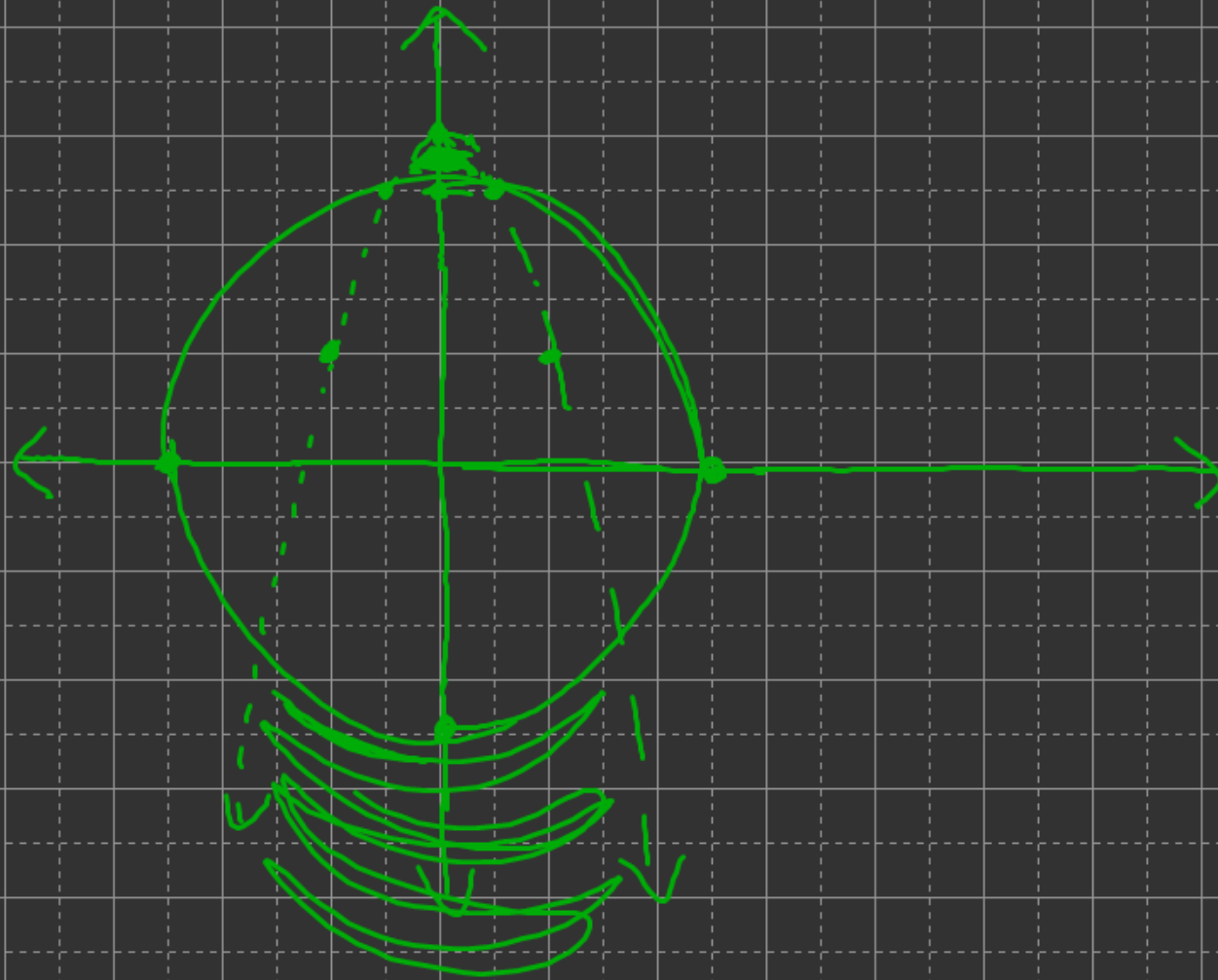
Half Planes



Ex) Graph $\begin{cases} y \geq x^2 - 3 & (0,0) \ 0 \geq -3 \\ y < \frac{1}{2}x + 2 & (0,0) \ 0 < 2 \end{cases}$ 1/3



$\{x\}$
Solve $\begin{cases} x^2 + y^2 \geq 25 & (0,0) \quad 0 \geq 25 \text{ outside} \\ y < -x^2 + 6 & (0,0) \quad 0 < 6 \text{ Inside} \end{cases}$



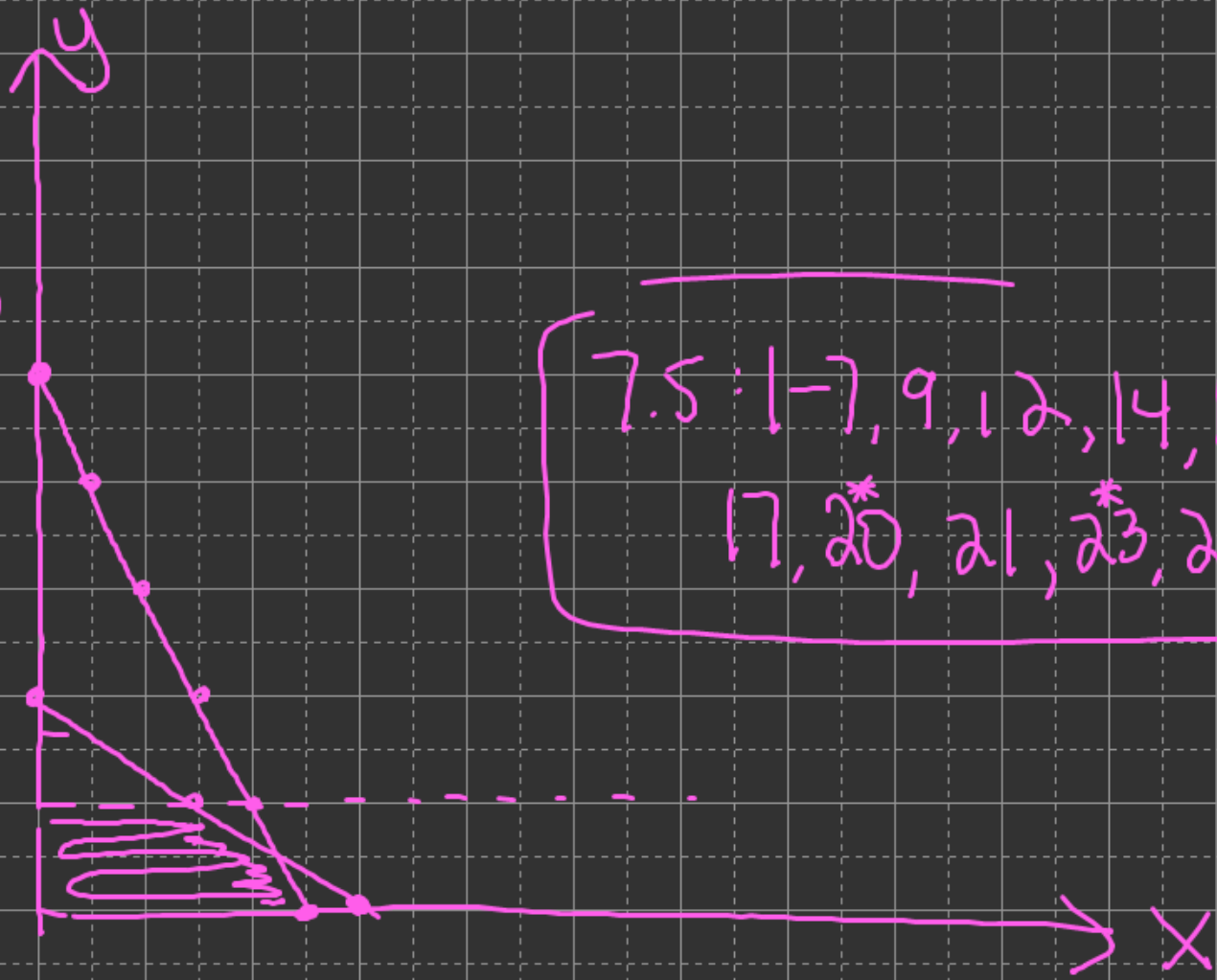
Ex) Solve the system

$$\begin{cases} 2x + y \leq 10 \rightarrow y \leq -2x + 10 \\ 2x + 3y \leq 12 \\ x \geq 0 \\ y \geq 0 \end{cases} \quad y \leq 2$$

$$\frac{3y}{3} \leq \frac{-2x + 12}{3}$$

$$y \leq -\frac{2}{3}x + 4$$

$$(0,0) \quad 0 \leq 4$$



$$\boxed{7.5: 1, 7, 9, 12, 14, 16, 17, 20^*, 21, 23^*, 24^*}$$