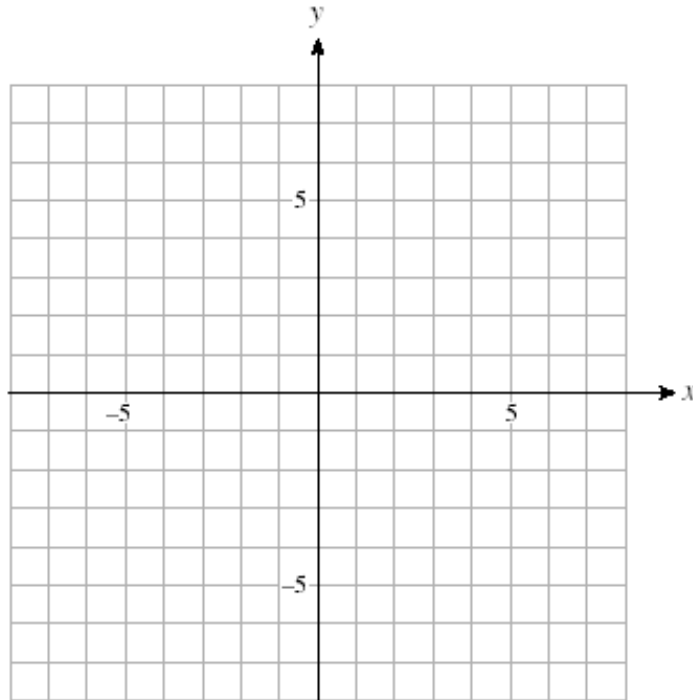Name: _____   Date: _____

Warmup Graph the solution to

$$\{(x,y)|2x - y \leq 4, x \in \mathbb{W}, y \in \mathbb{W}\}$$

Example A hockey team has 8 games left to play and needs 10 points to make the playoffs. A win is worth 2 points and a tie is worth 1 point.

Let *w* be the number of wins the team has and *t* be the number of ties.

a. Write an inequality that relates the number of games remaining to the number of wins and ties the team has.

b. Write an inequality that relates the number of wins and ties the team has to the number of points they need to make the playoffs.

Assignment   p.307 #1, 2   Quiz Next Day!

c. Graph the two inequalities on the same grid. Use a distinct shading pattern for the region where both
    graphs overlap.
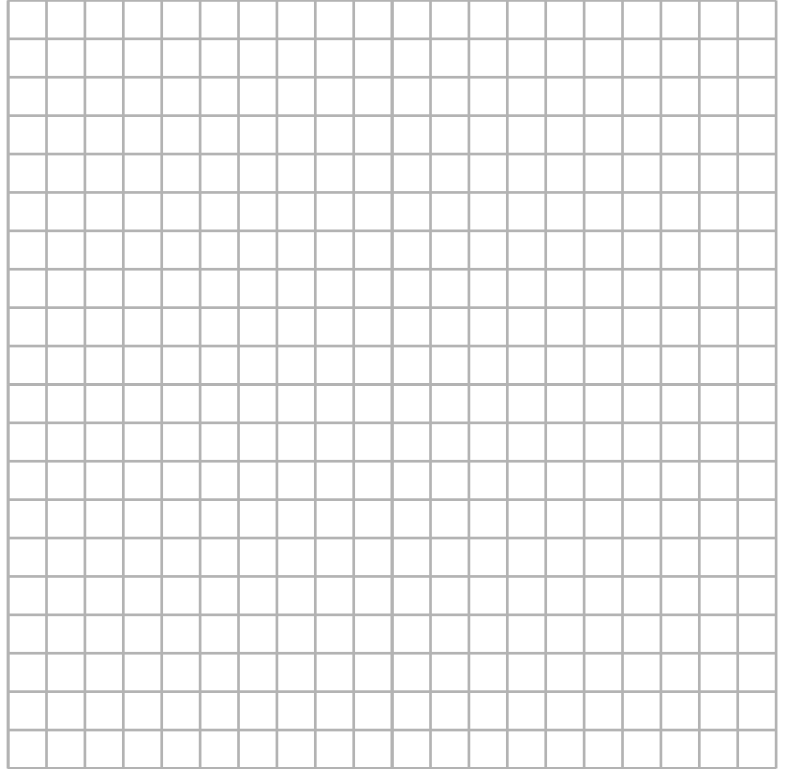
d. List all ordered pairs that satisfy both inequalities. Did you include any points on the boundary lines?

System of linear inequalities: