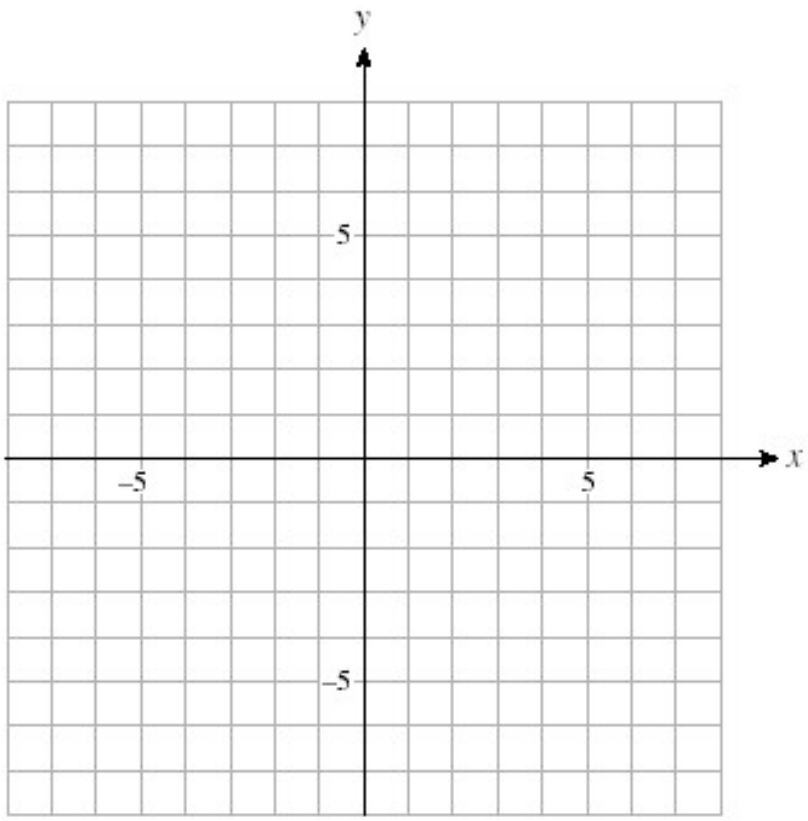
Name: _____ Date: _____

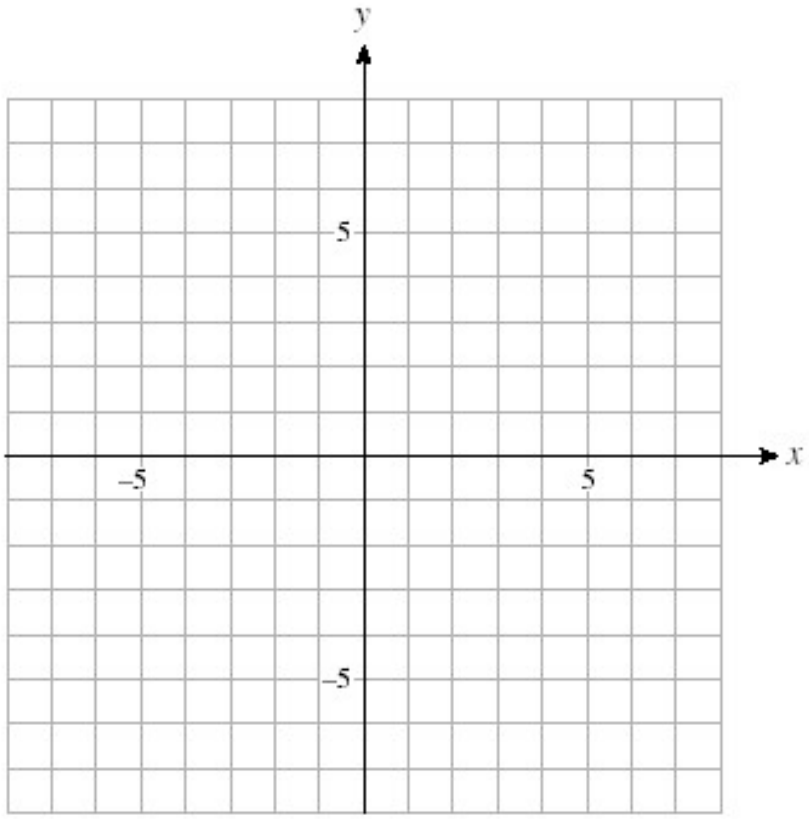
A **system of linear inequalities** can consist of two or more inequalities. The solution

Warmup Solve the system of linear inequalities:

$$y \leq \frac{3}{2}x + 3$$
$$y < \frac{1}{2}x - 2$$



Example A region is defined by the inequalities $x \geq 1$, $y \leq 5$, and $y \geq 2x - 2$. Graph this region.



Example Farmer Johnson owns a 40-hectare radish and rutabaga farm. He has $6000 to spend on planting costs. Planting radishes will cost Farmer Johnson $200/ha and planting rutabagas will cost him $100/ha. Produce a graph of a system of linear equations to model this situation.

- Let $x =$
- Let $y =$

List of the inequalities:

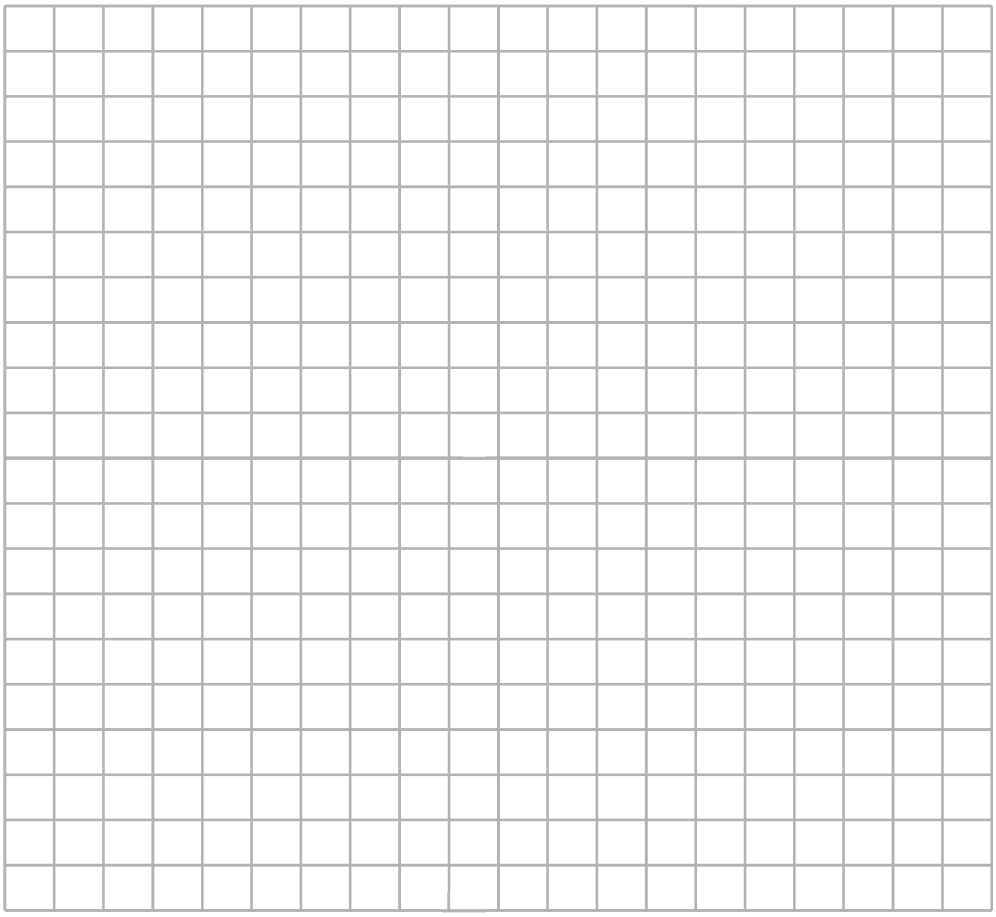
1.

2.

3.

4.

Assignment p. 317 #1-8 Quiz: Next Day!



Assignment p. 317 #1-8 Quiz: Next Day!