Finite Math - J-term 2019
Lines and Inequalities Worksheet
Due January 21, 2019

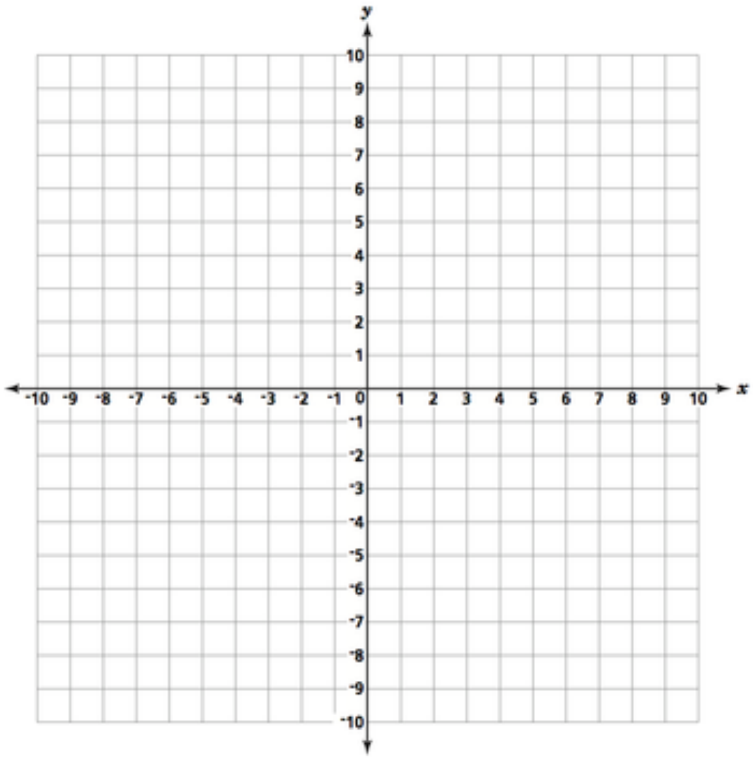
Name:_____

Homework (You don't have to turn in these homework problems, these are just for extra practice.)

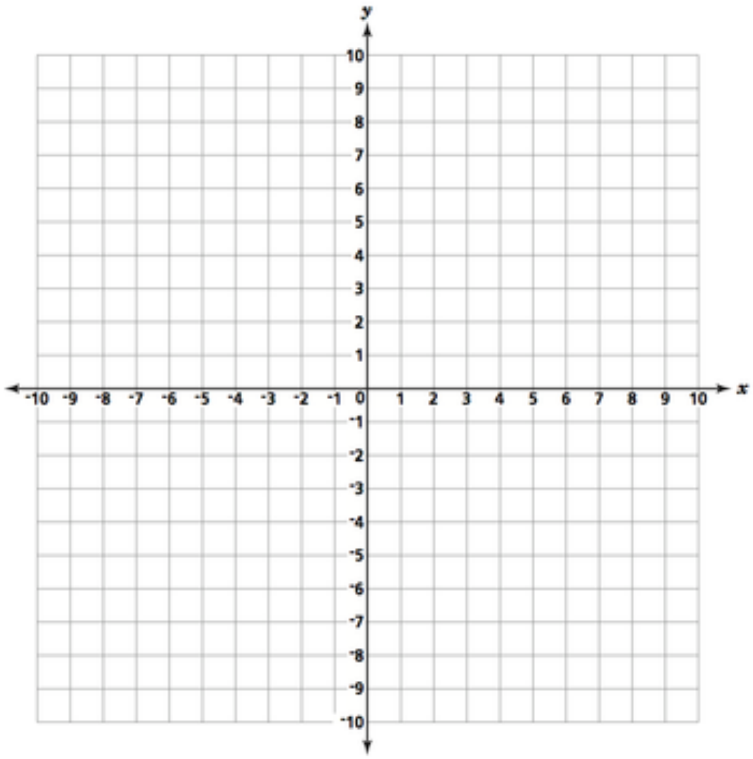
- Read Section 1.2, do problems 5, 7, 29, 30, 31, 32, 33, 41
- Graph the following lines:
  (1) $y = 2x$
  (2) $2x + 3y = 0$
  (3) $5x - 6y = 0$
- Read Section 4.1, pages 175-178, do problems 9, 11, 13, 14, 15, 16, 57, 59
- Read Section 5.1, do problems 9, 11, 13, 15, 17, 45

1. Part 1 - Counts as Quiz 5

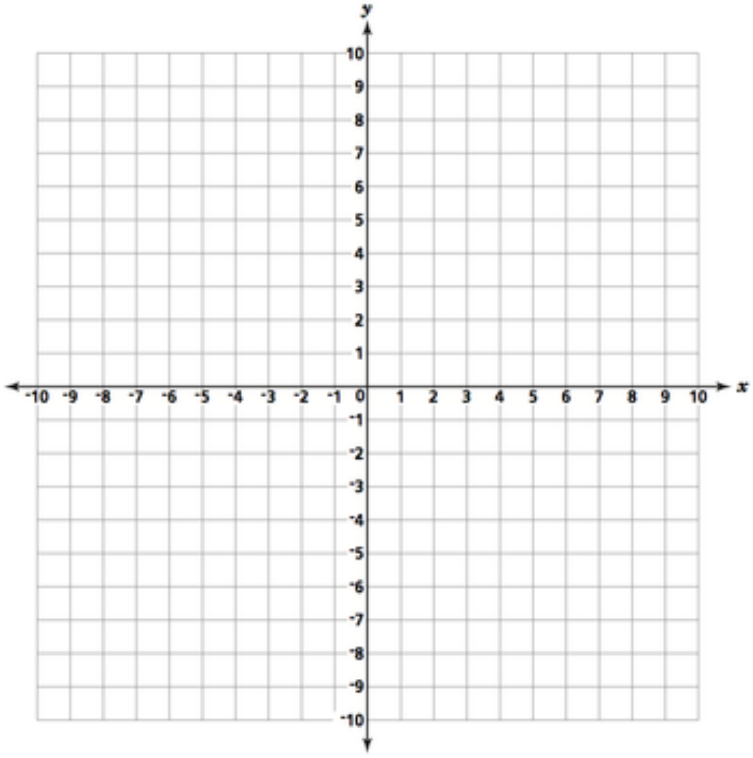
Problem 1. *Graph the line* $3x + 5y = 15$.



Problem 2. *Graph the line* $4x - y = 0$.

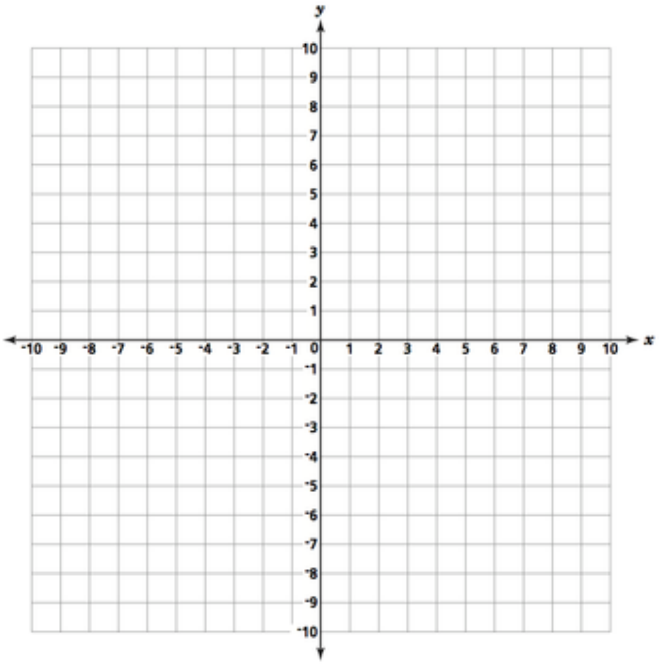


Problem 3. *Graph the lines* $x = 2$ *and* $y = -7$.



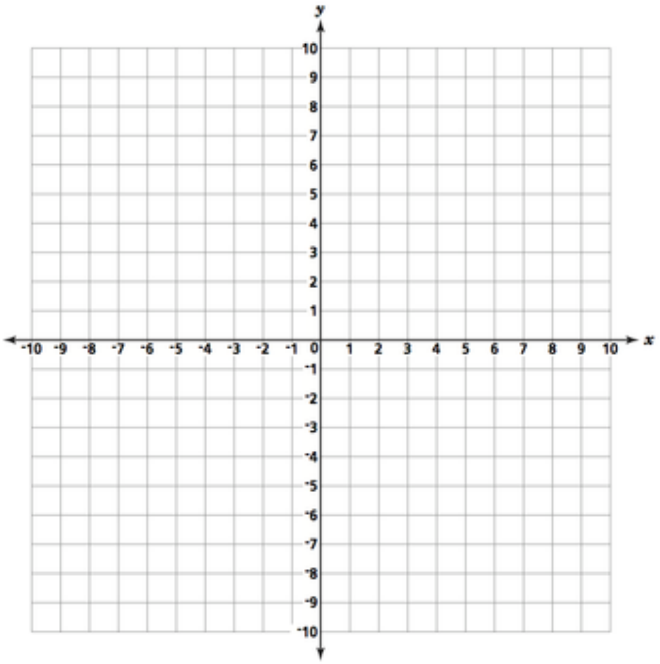
Problem 4. *Solve the system of equations by graphing. Be sure to verify your solution!*

$$\begin{aligned} x + y &= 3 \\ x + 2y &= 15 \end{aligned}$$



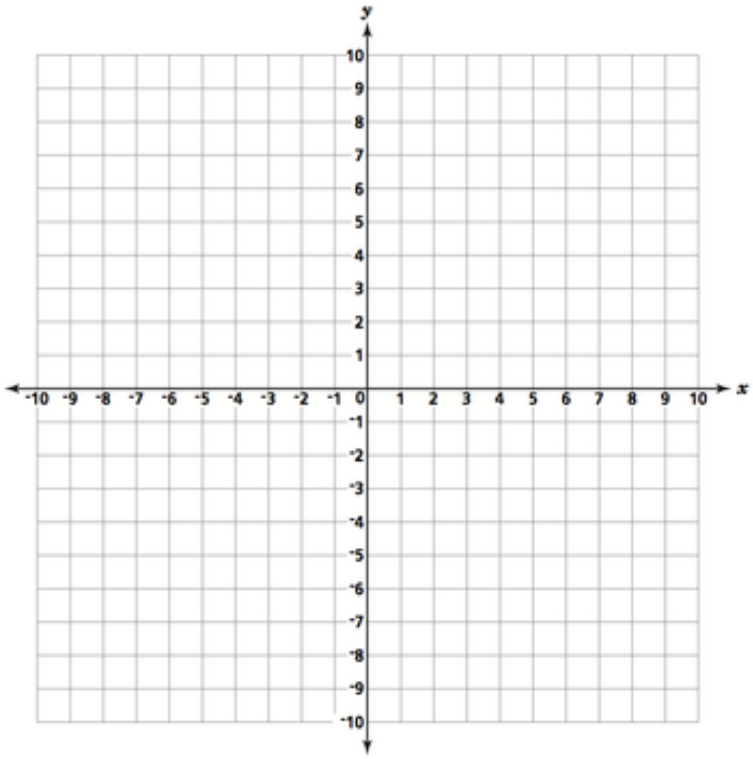
Problem 5. *Solve the system of equations by graphing. Be sure to verify your solution!*

$$\begin{aligned} 2x + 3y &= 18 \\ 4x + 6y &= -24 \end{aligned}$$

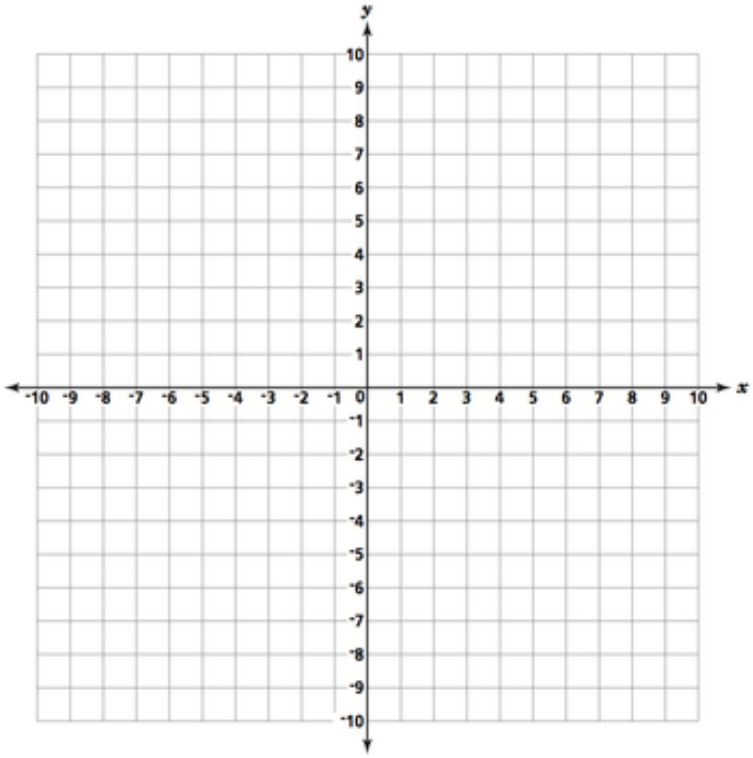


2. Part 2 - Counts as Quiz 6

Problem 6. *Graph the inequality* $y > x + 1$.



Problem 7. *Graph the inequality* $6x - 4y \leq 0$.



Problem 8. *Graph the inequality* $2x + 3y \leq 6$ *together with the nonnegativity conditions* $x, y \geq 0$.