

Module: Solving Systems
Lesson 5: Inequalities
Homework

Name: _____
Date: _____
Pd: _____

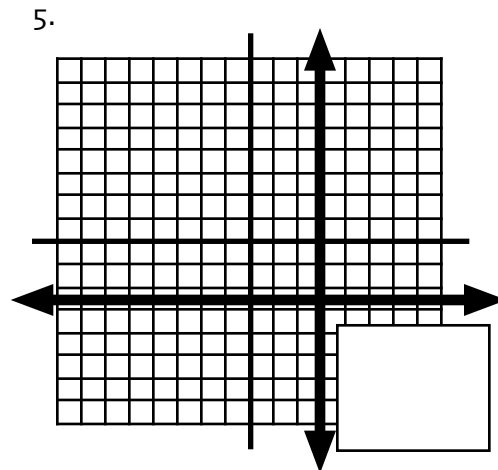
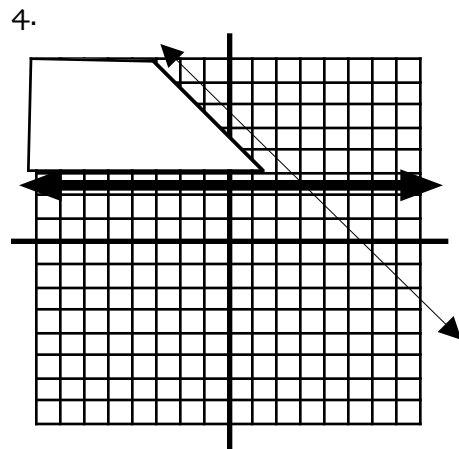
Solve each system of inequalities by graphing- on your GRAPH paper!

1. $y < 3x$
 $x + 2y \geq -8$

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

3. $2x + y < 9$
 $3y - x > 9$

Write a system of inequalities for each graph:



Use a calculator/ graph paper or your computer to solve the following. Sketch the solutions.

6. $y \geq 3x - 6$
 $y \leq x + 1$

7. $y \leq x + 9$
 $y > -x - 4$

8. $y < 2x + 10$
 $y \geq 7x + 5$

9. $2x + y \geq -4$
 $-5x + 2y < 1$

10. $2y + x < 6$
 $3x - y > 4$

11. $x > 5$
 $y \leq 4$

12. $y \geq 3x$
 $7y < 2x$

13. $y + 2 \leq x$
 $2y - 3 > 2x$

14. $-4x + 5y < 41$
 $x + y > -1$

Try the following for above and beyond
 15. Solve the following system:

$$\begin{aligned} x - y &\leq 5 \\ 5x + 3y &\geq -6 \\ y &< 3 \end{aligned}$$