

Name _____ Period _____

Date _____

Substitution HW

Directions: Solve each system of equations by substitution. *Show ALL you work!*

2. $y = 2x$
 $x + 3y = -14$

4. $x = -4y$
 $3x + 2y = 20$

6. $x = y - 7$
 $x + 8y = 2$

8. $y = 3x + 8$
 $5x + 2y = 5$

10. $y = 5x - 8$
 $4x + 3y = 33$

12. $x + 5y = 4$
 $3x + 15y = -1$

14. $x + 4y = 8$
 $2x - 5y = 29$

16. $5x - 2y = 14$
 $2x - y = 5$

18. $x - 4y = 27$
 $3x + y = -23$

20. $2.5x + y = -2$
 $3x + 2y = 0$

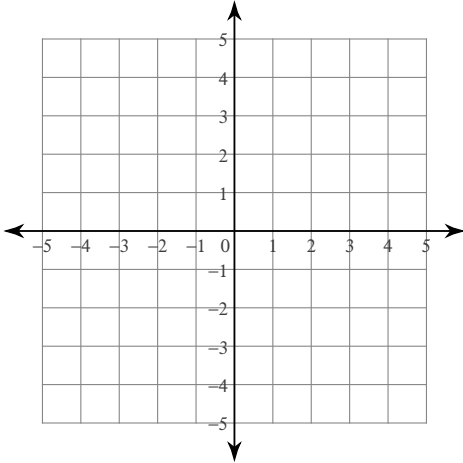
Solutions:

2.
4.
6.
8.
10.
12.
14.
16.
18.
20.

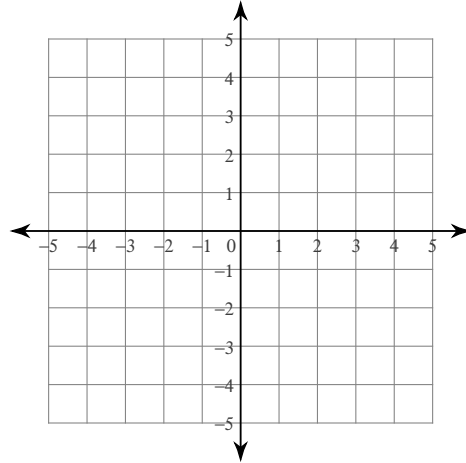
Systems of Inequalities

Sketch the solution to each system of inequalities.

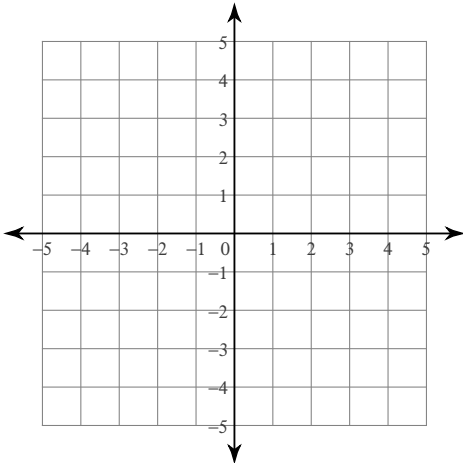
1) $y > 4x - 3$
 $y \geq -2x + 3$



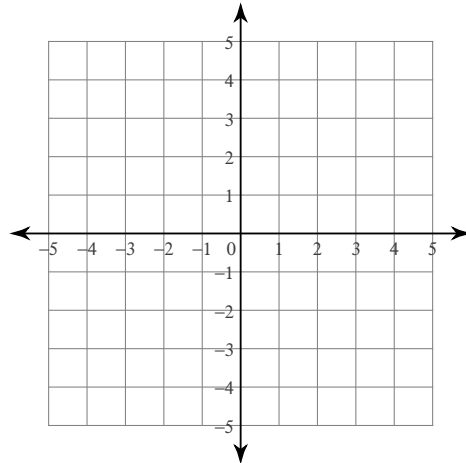
2) $y \geq -5x + 3$
 $y > -2$



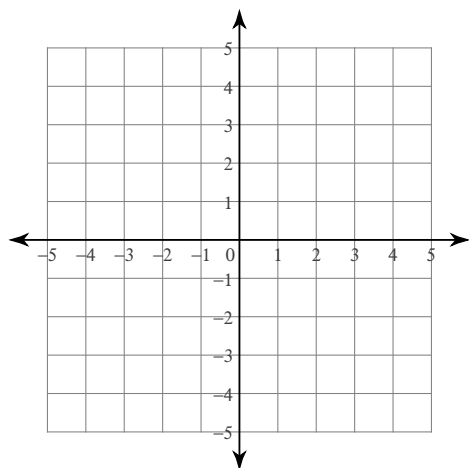
3) $y < 3$
 $y \leq -x + 1$



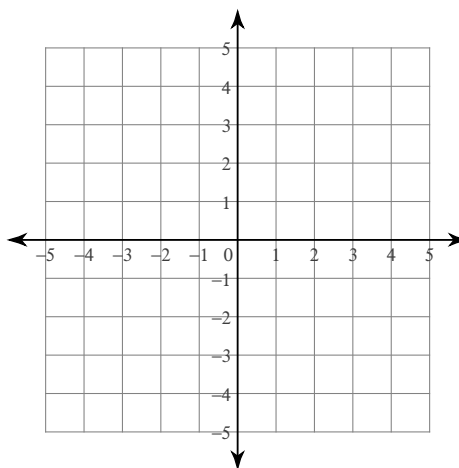
4) $y \geq x - 3$
 $y \geq -x - 1$



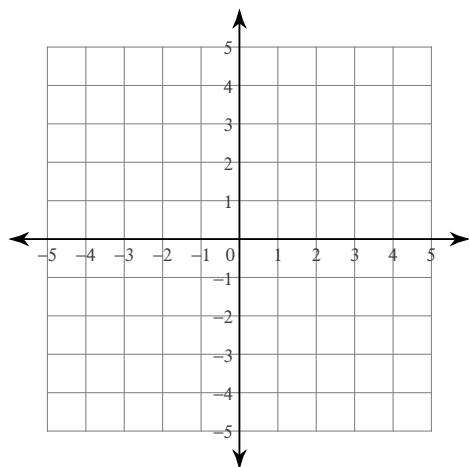
5) $x \leq -3$
 $5x + 3y \geq -9$



6) $4x - 3y < 9$
 $x + 3y > 6$



7) $x + y > 2$
 $2x - y > 1$



8) $x + y \geq 2$
 $4x + y \geq -1$

