

## Graphing Systems of Inequalities

**\*REMEMBER\***

$<$  or  $>$  = **dotted** line

$<$  or  $\leq$  = Shaded **below**

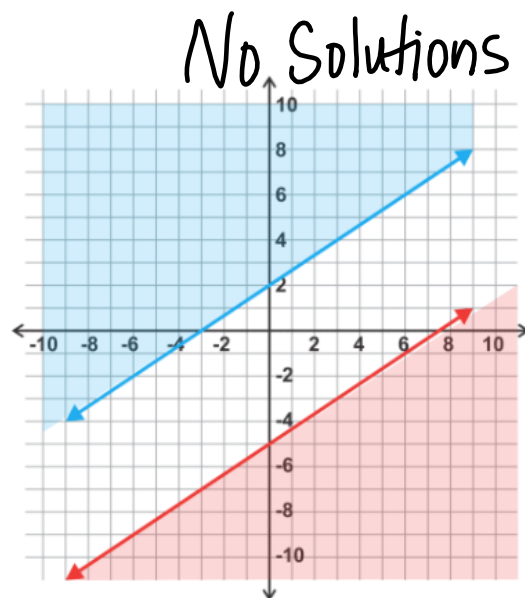
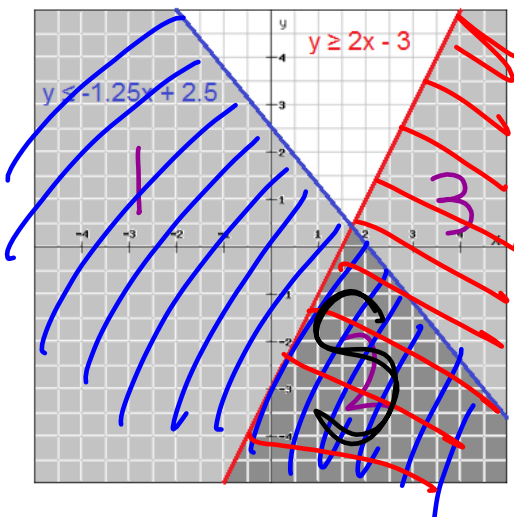
$\geq$  or  $\leq$  = **Solid** line

$>$  or  $\geq$  = Shaded **above**

**\*\*Solution** is the shaded area that makes  
**BOTH** inequalities true**\*\***

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What they look like:

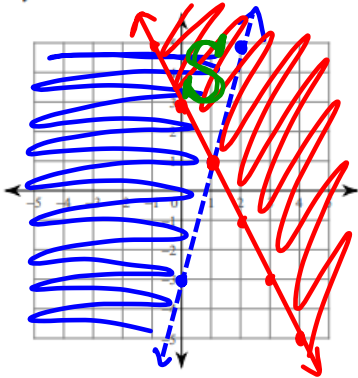


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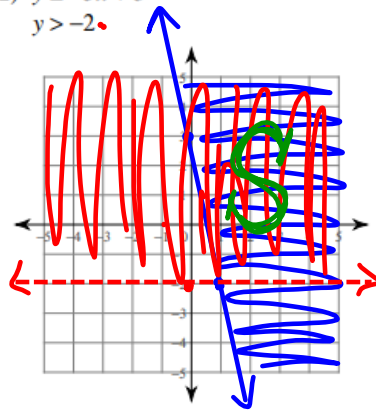
# Practice:

Sketch the solution to each system of inequalities.

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



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

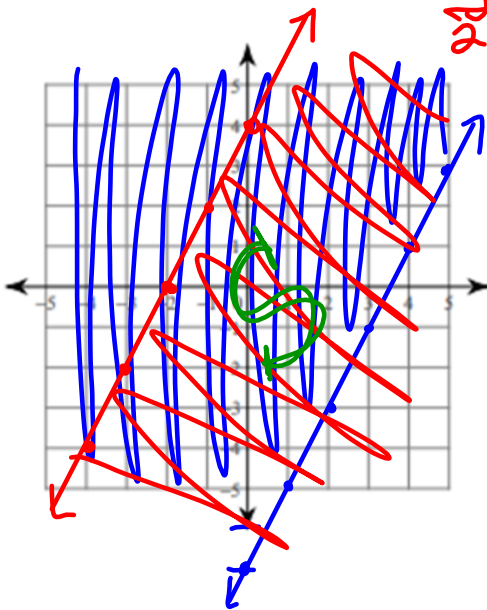


$x > 2$

A handwritten note  $x > 2$  with a vertical double-headed arrow pointing to the x-axis, indicating the solution set for a third inequality.

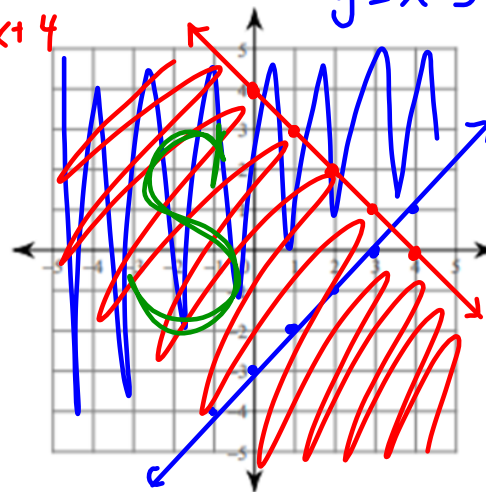
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3)  $y \geq 2x - 7$   
 $y \leq 2x + 4$



$2y \leq -2x + 8$   
 $2x + 2y \leq 8$   
 $y \leq -x + 4$

4)  $3x - 3y \leq 9$   
 $-\frac{3y}{-3} \leq \frac{-3x+9}{-3}$   
 $y \geq x - 3$



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