



**PROBLEMS AND SOLUTIONS**  
**GRAPHICAL REPRESENTATION OF LINEAR INEQUALITIES IN TWO VARIABLES**  
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**PLEASE NOTE THAT YOU CANNOT USE A CALCULATOR ON THE ACCUPLACER - ELEMENTARY ALGEBRA TEST! YOU MUST BE ABLE TO DO THE FOLLOWING PROBLEMS WITHOUT A CALCULATOR!**

**Problem 1:**

Graph the linear inequality  $2x - y \geq 4$ .

**Problem 2:**

Graph the linear inequality  $y \leq -3x - 6$ .

**Problem 3:**

Graph the linear inequality  $y > 2x$ .

**Problem 4:**

Graph the linear equation  $3y > -9x$ .

**Problem 5:**

Graph the linear inequality  $y \geq 0$ .

**Problem 6:**

Graph the linear inequality  $x \leq 0$ .

**Problem 7:**

Solve the following system of linear inequalities:

$$3y > -9x$$

$$y > 2x$$

### Problem 8:

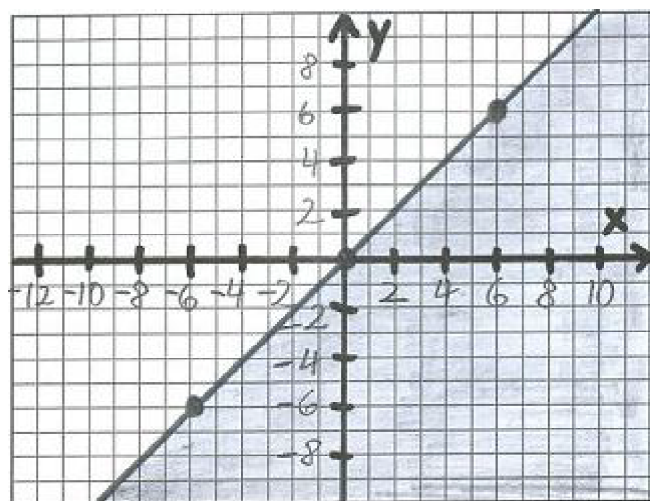
Solve the following system of linear inequalities:

$$y \geq 0$$

$$x \leq 0$$

### Problem 9:

Find the inequality that represents the shaded region.

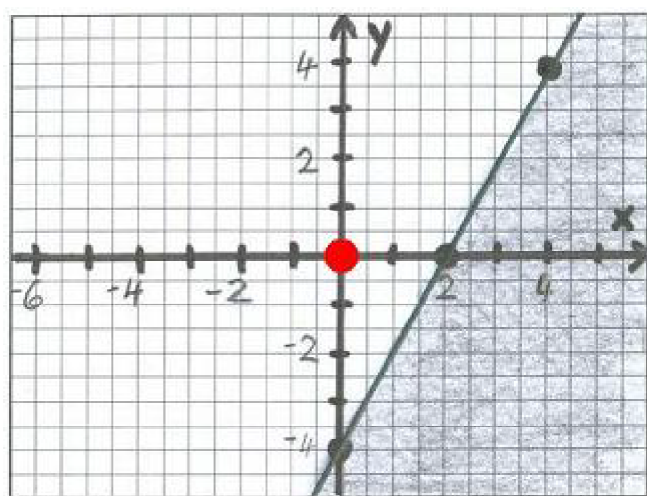


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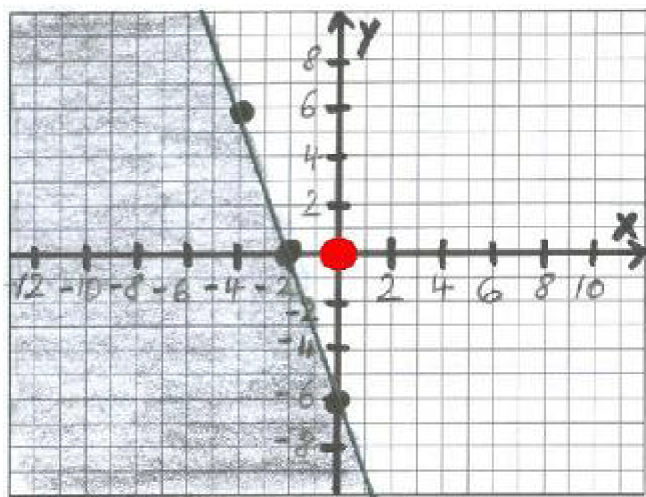
### SOLUTIONS

You can find detailed solutions below the link for this problem set!

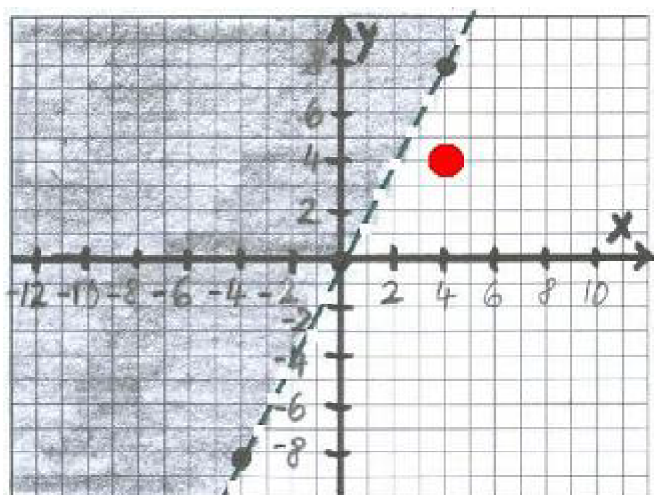
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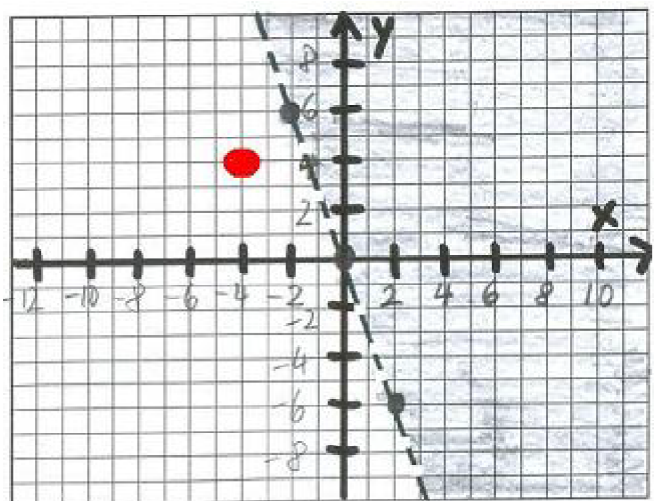
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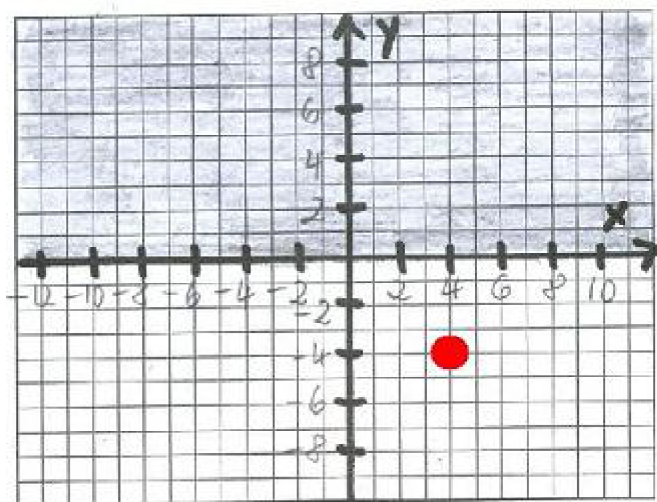
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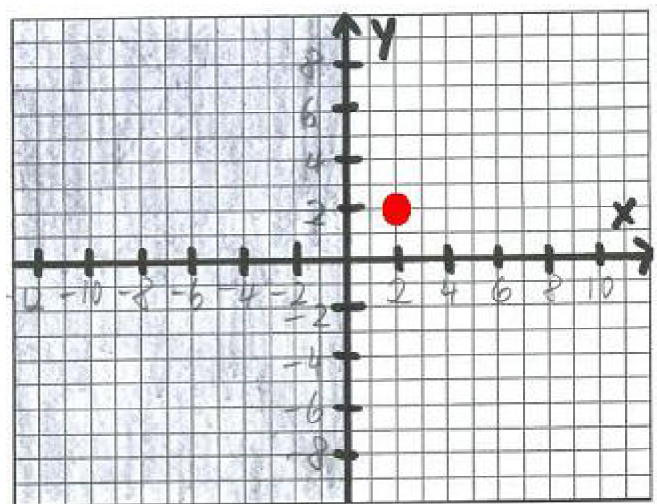
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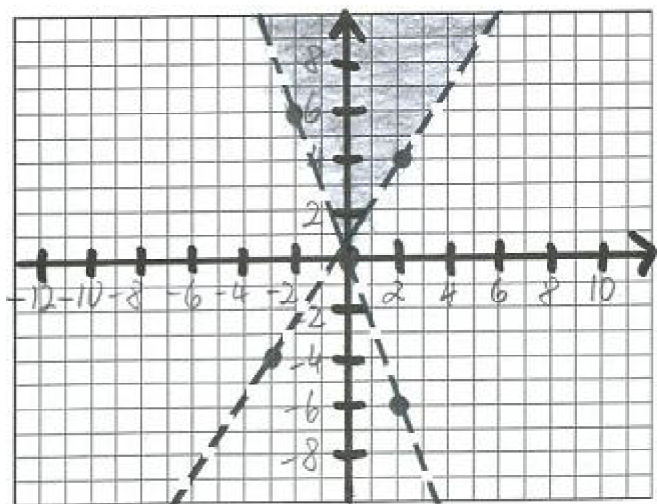
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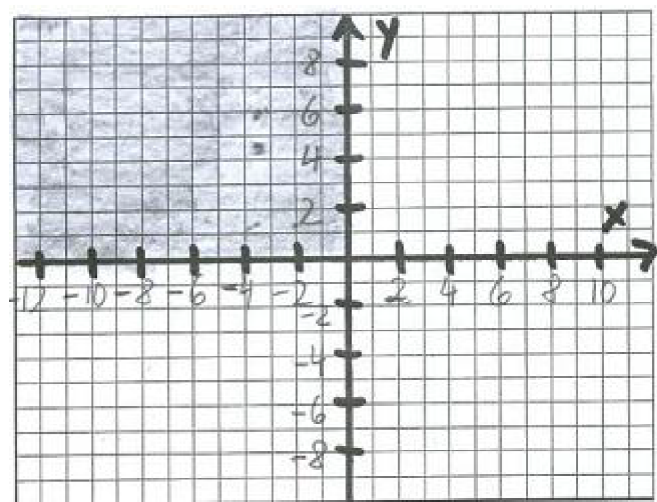
6.



7.



8.



9.  $y \leq x$