

**Worksheet 6.5 – Graphing Linear Inequalities in Two Variables – Textbook pages 360-366**

**LEVEL 1** Check to see if each ordered pair is a solution to the inequality. Show your work.

1)  $x + y < -1$

2)  $y - x \geq 4$

3)  $6x + 2y < 24$

(-3, -1)

(-2, 2)

(3, 2)

(0, 2)

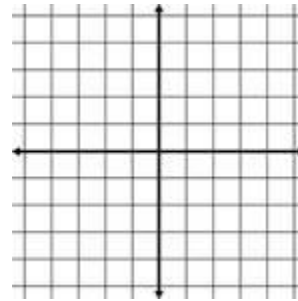
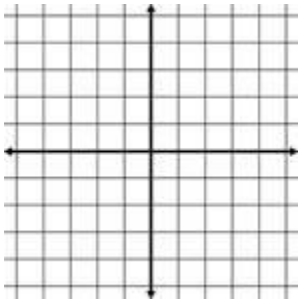
(0, 4)

(5, -3)

**LEVEL 2** Sketch the graph of each inequality on the coordinate plane. Show your work.

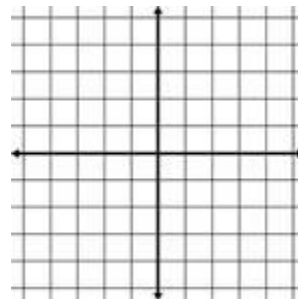
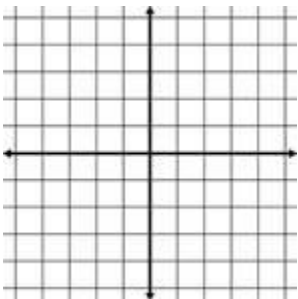
4)  $x < 2$

5)  $x + 4 > 9$



6)  $y \geq -4$

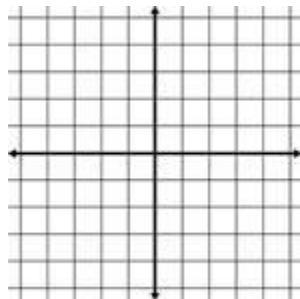
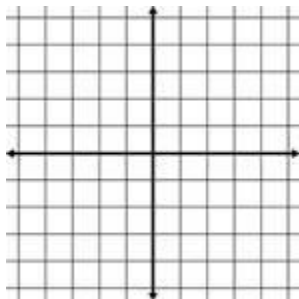
7)  $-2x \leq -6$



**LEVEL 3** Sketch the graph of each inequality on the coordinate plane. Show your work.

8)  $x + y < 3$

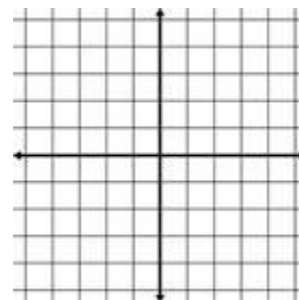
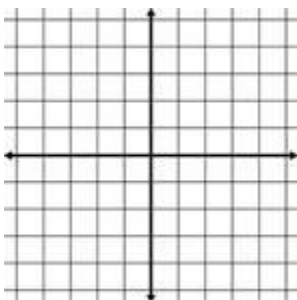
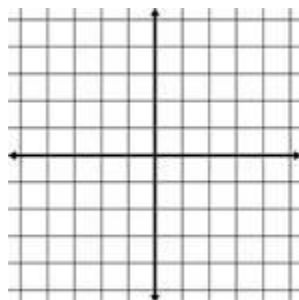
9)  $x - y \leq -5$



10)  $y + 5x > -6$

11)  $2x + 3y > 12$

12)  $3x - y \geq 2$



**LEVEL 4**

13)  
You and your friends go to a bagel shop for breakfast. Together you have \$15 to spend. Each bagel costs \$.95 and each glass of juice costs \$1.50. Let  $b$  represent the number of bagels you can buy. Let  $j$  represent the number of juices you can buy.

a) Write an inequality that represents the number of bagels  $b$  and the number of juices  $j$  that you can afford.

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b) Sketch a graph of the inequality from (a)

