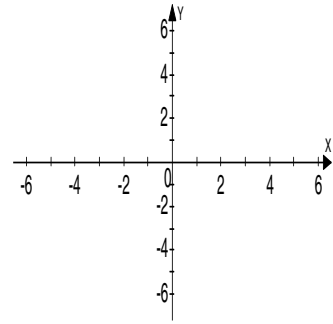


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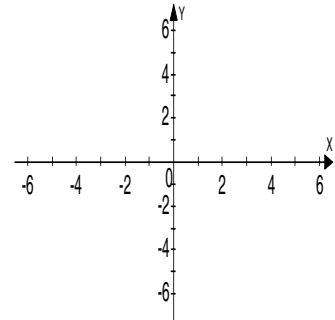
4.  $2x + y \leq 4$   
 $x - 1 > 0$

4.



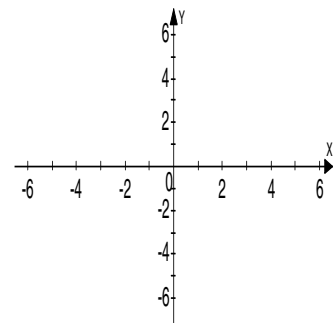
5.  $x - 2y > 6$   
 $4x - y \leq -4$

5.



6.  $x < -4$   
 $y < -2$

6.

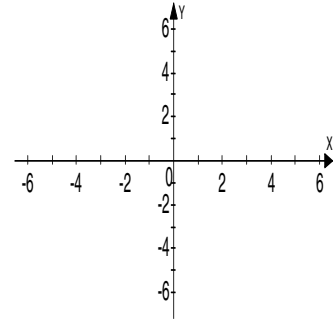


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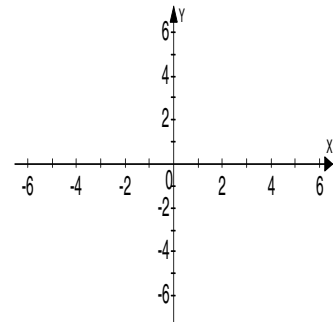
7.  $y < 3x - 1$   
 $2x + y > 0$

7.



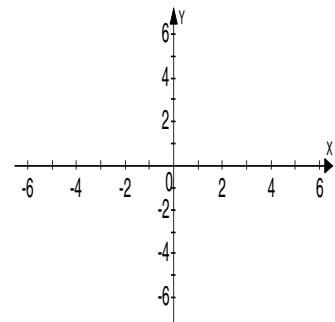
8.  $x - y > 4$   
 $x + y > 4$

8.



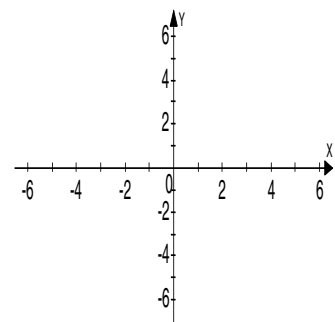
9.  $y \leq 3$   
 $y \geq -3$

9.



10.  $3x - 2y \leq -2$   
 $2x + y \geq 5$

10.



Name \_\_\_\_\_

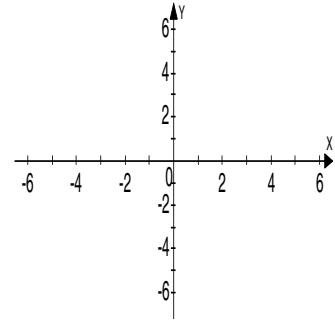
Date \_\_\_\_\_

**Additional Exercises 4.5**  
**Form II**  
Systems of Linear Inequalities

Graph the system of inequalities. Indicate the solution by shading.

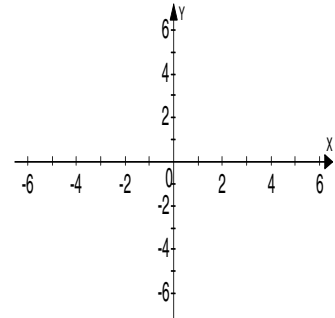
1. 
$$y \geq \frac{1}{3}x - 6$$
$$y \leq 4x + 2$$

1.



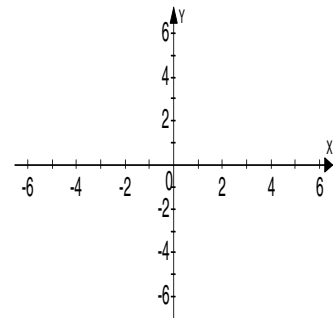
2. 
$$y < \frac{3}{4}x$$
$$y < -\frac{1}{2}x - 1$$

2.



3. 
$$x \geq 3$$
$$y \geq 3$$

3.

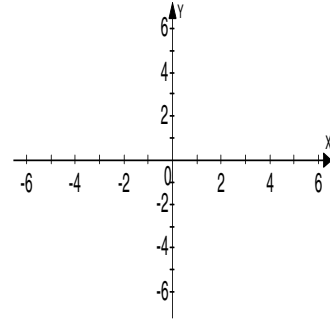


Name \_\_\_\_\_

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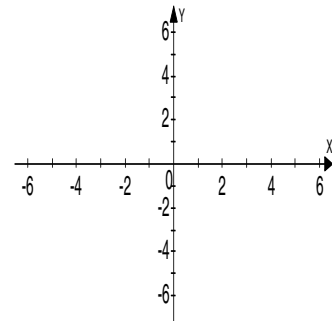
4.  $2x + y \geq 4$   
 $x - 1 > 0$

4.



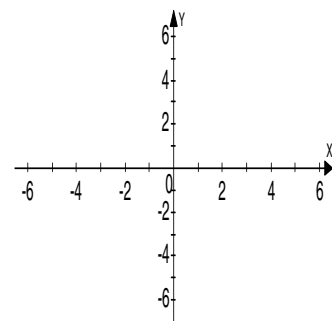
5.  $3x - 2y \geq 6$   
 $y \leq -3$

5.



6.  $x - 4y \leq 12$   
 $2x - 4y \geq 8$

6.

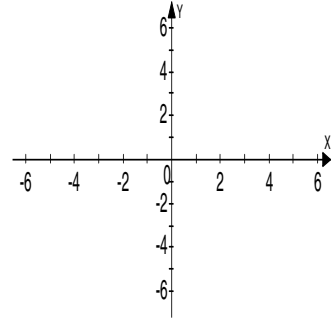


Name \_\_\_\_\_

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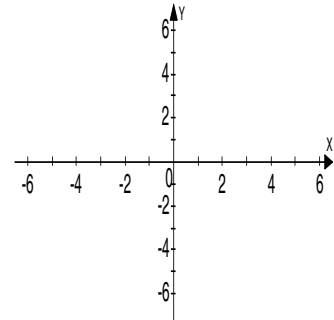
7.  $2x + y \geq 2$   
 $y \leq x - 3$

7.



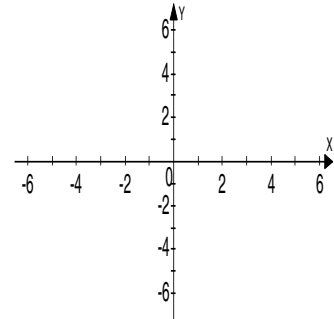
8.  $2x + 3y < 6$   
 $x - 2y < 4$

8.



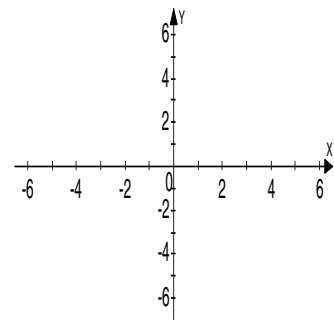
9.  $x > -4$   
 $y < -3$

9.



10.  $5x + 10y < 10$   
 $3x - 2y > 8$

10.



Name \_\_\_\_\_

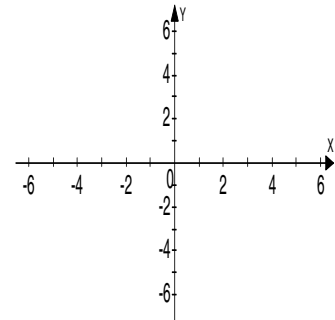
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**Additional Exercises 4.5**  
**Form III**  
Systems of Linear Inequalities

Graph the system of inequalities. Indicate the solution by shading.

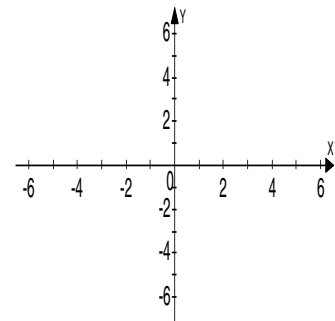
1. 
$$y > -\frac{1}{4}x + 2$$
$$y < x$$

1.



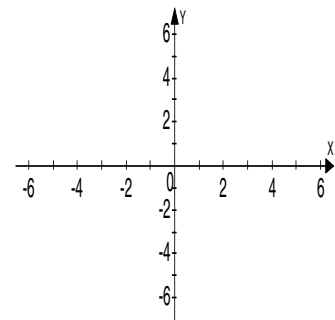
2. 
$$y < \frac{3}{4}x$$
$$x < 3$$

2.



3. 
$$3x + 2y \geq -6$$
$$3x - 2y \leq -10$$

3.

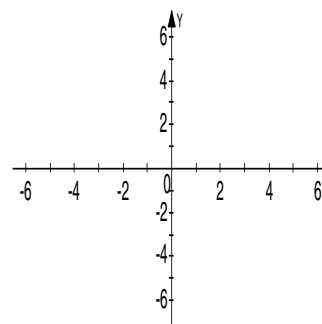


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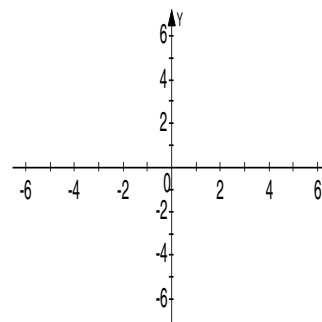
4.  $y < 3x - 1$   
 $y < -2x + 4$

4.



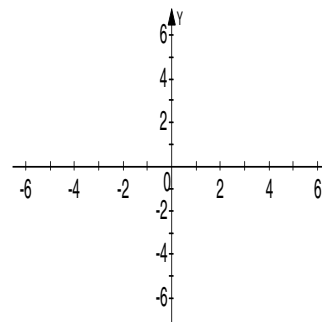
5.  $x \leq 3$   
 $y < -4$

5.



6.  $3x + 4y < 16$   
 $3x - y > 4$

6.

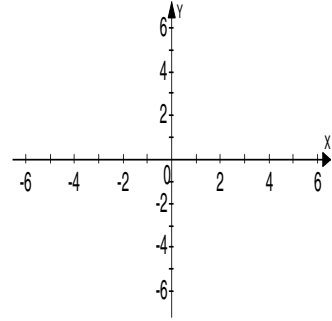


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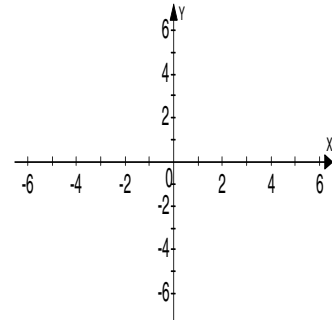
7.  $2x - y < -2$   
 $2x + y < 2$

7.



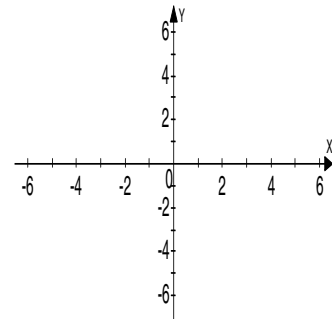
8.  $x \leq 3$   
 $x \geq -1$

8.



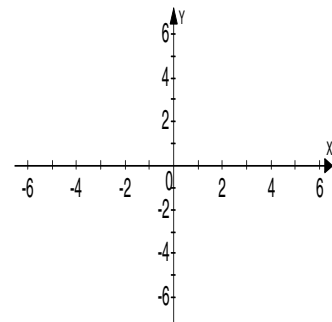
9.  $y \geq 3$   
 $y \leq -2$

9.



10.  $5x + 3y < 3$   
 $4x + y > 4$

10.





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11. Mrs. White wants to crochet beach hats and baby afghans for a church fundraising bazaar. She needs 5 hours to make a hat and 6 hours to make an afghan and she has 30 hours available. Thus,  $5x + 6y \leq 30$ , where  $x$  is the number of hats and  $y$  is the number of afghans. Can she make 0 hats and 4 afghans in the time allowed? 11. \_\_\_\_\_
12. An office manager needs to buy new filing cabinets. Cabinet A takes up 7 square feet of floor space. Cabinet B takes up 8 square feet of floor space. The office has room for no more than 56 square feet of cabinets. Thus,  $7x + 8y \leq 56$ , where  $x$  is the number of A cabinets and  $y$  is the number of B cabinets. Does the office have enough floor space for 9 A cabinets and 5 B cabinets? 12. \_\_\_\_\_